Market Maverick

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DOWLOG PROGRAM
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Chapter 1

Introduction

What the Maverick Does for You

Many of us are most comfortable when we are part of the majority. In fact, we are taught from infancy that the majority is always right. The stock market is no exception. It is much easier psychologically to buy a discovered stock that is mentioned on "Wall $treet Week" than to find, investigate and purchase neglected issues.

On Wall Street, the easiest investment is often the most dangerous. It is an irony of the stock market that success comes from acting contrary to the opinion of the majority of investors.

The Market Maverick is the first program to help you measure the direction and intensity of crowd psychology so that you can anticipate change rather than react to it.

As you will learn when reading the Investment Section of this manual, the Maverick is grounded on sound principles and a wealth of practical experience. We are confident that it will become an important part of your investment thinking.

About the Manual

This manual is divided into two major sections: (1) Investment and (2) Computer. The investment concepts are necessary to effectively use the computer section. However, we know that you are anxious to start using the Maverick. The following table is a guide to learning the Maverick's capabilities in the shortest time.

	Investment	**Computer**
Level 1	Chapter 2 *"Investment Framework"*	Chapter 9 *"Getting Familiar"*
Level 2	Chapter 4 *"Indicators"*	Chapter 10 *"Search Program"*
Level 3	Chapter 6 *"In Depth Value Analysis"*	Chapters 13 & 14 *"Valuation" and "Sensitivity"*
Level 4	Chapter 3 *"Decisions in Practice"*	

Note that a "Task Finder," Chapter 7, is included to help you locate specific applications quickly.

Introduction to Investment Section

The Maverick helps you make better investment decisions. It provides perspective to assess recommendations from brokers and advisory services. It generates new ideas. It is a sound framework for identifying opportunities and evaluating risks.

However, successful investing requires judgment. The computer is a tool to help in our thinking, not do our thinking for us. Not every opportunity is equally appealing to every investor. Since the Maverick accommodates a variety of investment objectives, only you can judge whether a stock's reward-risk characteristics are appropriate for you.

No approach, including the Maverick, is correct every time. The Maverick raises your odds, but it does not guarantee success. The odds will not work in your favor if you select only a few stocks or measure your results over a period of months rather than a complete market cycle.

How to Use This Section

The next five chapters provide the basic investment information to use the Maverick effectively. In particular, chapters 2 and 3 are required reading before making decisions with the Maverick. Chapter 3 traces a typical stock's price cycle, and suggests the factors you should consider in reaching conclusions.

Chapter 4 briefly discusses each indicator. It is designed as a handy reference when searching the Manager data base.

Chapter 5 discusses how you can assess non-Manager stocks from a value perspective. The value model is useful for evaluating recommendations from brokers and advisory services. Several useful sources for the inputs and timing ratings are mentioned.

Finally, chapter 6 contains an explanation of the value model. This is necessary background for interpreting the Valuation and Breakeven reports, and for sensible use of What-If analysis.

Chapter 2

Investment Framework

Many investors, particularly large institutions, focus on the corporate outlook when evaluating a particular stock. Unfortunately, a stock's price may rise or fall 20% or more without any apparent change in the outlook. Knowledge of the fundamentals is insufficient without insight into how market psychology is impacting a stock. The Maverick measures psychology from two perspectives:

(1) Has psychology reached an extreme — does a genuine opportunity exist?

(2) What is the trend of psychology — when should action be taken?

Identifying Opportunity

Some investors concentrate on identifying trends in psychology. Once a trend is established, they believe, it is likely to continue. Regrettably, a trend often loses momentum just as it is discovered. When psychology reaches an extreme level, the trend is usually reversed. Knowledge of the trend is insufficient without insight into the intensity of psychology.

The probability that a trend will continue is inversely related to the intensity of market psychology. This may sound strange to you. But, the history of the stock market proves it again and again. When psychology becomes excessive on the downside, expectations are low. Good news comes as a genuine surprise, and a stock may bounce sharply. A neglected issue may even rise after an apparently negative development because the news is better than expected.

When psychology becomes excessive on the upside, expectations are high. Good news fails to impact the price. In fact, a seemingly positive development may cause a stock to decline because it fails to measure up to expectations. An adverse announcement causes a stock to decline precipitously. Frequently, the reaction in a popular issue is so severe that it is difficult to get out.

For these reasons, neglected, out-of-favor stocks consistently outperform the popular favorites. It is an irony of the stock market that success comes from acting contrary to the opinion of the majority of investors. This is because the market is emotional. When a stock is popular, investors are willing to buy at any price. When an issue is in disfavor, investors sell no matter what the price. This disregard for value is a major opportunity for those who have an idea of what constitutes a fair price for a stock.

The greater the difference between the current price and a fair price, the greater the extreme in investors' psychology. The Maverick's Value indicator estimates a fair value for a stock. In a decade of actual usage, the cheap stocks have consistently outperformed the market, while expensive stocks have lagged behind the market.

When to Act

Merely because psychology is excessively positive or negative does not tell you when to establish a position. An out-of-favor issue may remain unpopular for some time. Popular stocks can rise beyond any reasonable expectation. When you anticipate a change in psychology, you need something to indicate that the change is taking place.

The Maverick's Timing indicator measures the trend of psychology. Stocks with strong trends are likely to perform better than those with weak trends, particularly in the near term. When you find a cheap stock with an improving trend, psychology is no longer negative. Those investors who wished to sell have already sold. New investors are discovering that the stock has merit.

For an expensive stock with a deteriorating trend, psychology is no longer positive. Investors are beginning to worry that the price might slide further. Few new investors are available to buy now because those likely to buy have already taken a position.

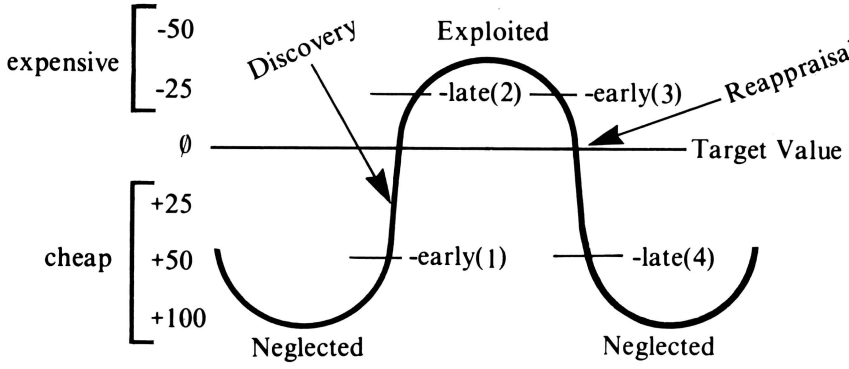
You can guess what the most probable outcome is in each of these cases. Only the Maverick gives you the tools to identify them.

Gaining Perspective

The Price Cycle Chart below depicts how investor psychology impacts a stock's price over time. The balance of this chapter shows how to use the Maverick to measure investor psychology. Frequent reference will be made to this chart.

Your primary objective in using the Maverick is to discern where a stock is in its price cycle. The Value indicator measures the intensity of psychology (vertical scale on the chart). The Timeliness indicator measures the trend. Once you have defined how psychology is impacting a stock, you can decide what action is appropriate.

Price Cycle Chart



Value Indicator

The above chart has a vertical scale of -50 to +100, with Ø representing a stock's target value. The target value is established by the Maverick's value model. The Maverick calculates an appropriate estimate of the price at which the stock should be trading within 12 months. Since a target value is merely an estimate, think of a stock as "fairly" priced if it is trading within 10% of its target value (see chapter 6 for a detailed description of the value model).

When a stock is trading at -50, it has an implied downside risk of 50%. A stock trading at +100 must rise 100% to reach its price target. In the latter stages of a bull market, most stocks are clustered at the top of the price cycle chart. At the end of a bear market, the majority of stocks will be at the bottom of the chart. It is as rare to find a stock with more than 50% downside as it is to find a stock with more than 100% upside. For our purposes, these limits represent the extremes in investor psychology.

Absolute Value

There are two ways to view the Value indicator. First, it is an absolute sign of value. The greater the difference between a stock's price and its target value, the more confident you can be that psychology is excessive. The chart indicates that cheap stocks have 25% or more upside potential while expensive stocks have 25% or more downside risk. Generally, purchases should be concentrated in the cheap category. The best short sale candidates are in the expensive category.

Relative Value

The Value indicator also is a relative sign of value. The Manager data base provides sufficient breadth to enable you to make a statement, "XYZ is comparatively cheap" or "ABC is comparatively expensive." Manager stocks are ranked according to their upside potential. The top 10% is assigned a rank of 1, the second 10% a rank of 2, ..., and the bottom 10% a rank of 10. The best purchase candidates are found in the top 20% (1 or 2). The best short sale opportunities are in the bottom 20% (9 or 10).

Both the absolute and relative value perspectives are useful in making decisions. A high relative rank is not very useful if a stock's upside potential is only 10%. This can occur in the final stages of a bull market, when even the most attractive stocks have limited appreciation potential. At such times, you may wish to avoid new commitments altogether.

Similarly, a stock with 30% upside potential is not particularly attractive if the average stock has 40% upside. This can occur in the final chapter of a bear market, when even the least attractive issues have significant upside potential. In such cases, increase your overall investment in stocks, and raise your minimum standards.

In summary, the relative perspective helps you isolate the stocks that are most likely to perform better or worse than the market. The absolute perspective defines the intensity of investor psychology. Placing a stock vertically on the price cycle chart does not tell you whether the stock is being discovered or being reappraised. This information is absolutely necessary if you expect to achieve consistent investment results.

Example: "Identifying the Trend Pays Off"

In February, 1983, both Lanier Business Products and Liz Claiborne had 80% upside potential according to the Value indicator. However, Lanier was in the late stages of reappraisal (#4 on the Price Cycle Chart), while Liz Claiborne was being discovered (#1). By September, LIZC had risen 64% while LBP was unchanged. During this period, the Dow Jones Industrials gained 10%.

Timing Indicator

The above example illustrates that cheapness alone is not a sufficient reason to buy a stock. The Maverick's Timing indicator helps you distinguish between stocks such as Lanier and Liz Claiborne.

The Timeliness rating measures the direction of psychology. Is a stock in investment favor or disfavor? Are investors becoming more

optimistic, or is psychology deteriorating? In general, psychology is likely to persist until it reaches an extreme.

It is much easier to discern whether psychology is positive or negative than to predict future psychology. Some investment services (e.g. Value Line Investment Survey) attempt to predict whether a stock will gain favor by measuring the trend of reported earnings. The assumption is that the stocks with the best earnings trends will gain investor support. Unfortunately, however, there is considerable evidence that stock prices react before earnings are actually reported. The earnings trend may then be a lagging indicator of investor psychology.

Others attempt to predict psychology by identifying patterns or trends in a stock's price over time. The assumption is that a stock's price is the best single measure of investor psychology. While the assumption is correct, there is no evidence that analysis of a stock's trading history is useful in predicting future price movement.

Whereas the trend of a stock's price is not predictable, there is some evidence that the trend of the relative price is. In relative price analysis, a stock's price performance is compared to the performance of other stocks. This provides information concerning which stocks are gaining favor or losing favor within the market as a whole. Often, relative strength analysis can identify improvement or deterioration sooner than the absolute price alone. For example, in a strong market, a stock may be gaining ground, but at a slower rate than other stocks, suggesting that it will retreat when a market correction occurs.

It would be misleading to suggest that relative strength is without faults. First, it has become increasingly popular in recent years. Second, some long term academic studies have demonstrated its inadequacy as a sole decision criterion.

Nonetheless, relative strength is clearly superior to monitoring a stock's price in isolation. Further, relative strength is the most productive means of gauging investor psychology. Thus, it is an excellent companion to the Value indicator. It helps avoid making premature commitments in cheap stocks where psychology is deteriorating. It helps an investor profit from a wave of enthusiasm for a stock even though the price has risen above the target value.

For these reasons, our Timeliness indicator is based on the trend of stock's relative price. The purpose of the Timeliness indicator is to distinguish the stocks that are being discovered from those that are being reappraised. As you will recall from our discussion of the Value indicator, it is excellent for placing a stock vertically on the price cycle chart. However, two cheap stocks are indistinguishable from each other without insight into the trend of psychology. The Timeliness indicator

provides that perspective.

Rating Defined

Each week, a stock's price is divided by the price of the Standard & Poor's 500 (S & P 500) index. The trend of the relative price is measured over 26 weeks, with emphasis on the most recent weeks. The rating divides stocks into six groups:

Market Maverick Timeliness Rating

Strong	1	Established Uptrend
	2	Confirmed Uptrend
Neutral	3	Early Uptrend
	4	Early Downtrend
Weak	5	Confirmed Downtrend
	6	Established Downtrend

Experienced investors know that any Timeliness rating will detect more apparent opportunities than genuine opportunities. That is, some trends will be unsustainable because a stock is making a "false" move. Every stock market timing tool suffers from this deficiency, and our rating is no exception. Our advantage is that we analyze a stock from two perspectives. This raises our chances of being correct.

As the example below illustrates, timing alone cannot distinguish between being early or late within the discovery or reappraisal stages of a stock's price cycle.

> Example: "A Favorable Trend is Not Enough"
>
> In April, 1983, Apple Computer and First Bank System both enjoyed the highest rating from several well known timing services. By September, Apple had declined 55% while First Bank System gained 16%. Over the same period, the Dow Jones Industrials rose 2.7%.

What happened? In April, Apple had a Value rank of 8 and First Bank System a rank of 1. Timing is useless without perspective concerning the level of investor psychology. Cheap stocks such as First Bank System consistently outperform popular issues such as Apple.

Sometimes, the best investments do not have strong Timeliness ratings. Early in a stock's up cycle, the Timeliness rating will be 3. Cheap stocks in early uptrends can be an excellent source of ideas if your goal is to stay one step ahead of the crowd.

Example: "Anticipating Change"

In April, 1983, banks and energy issues dominated the top 10% of Manager stocks ranked according to the Value indicator. Some of the banks had strong Timeliness ratings (mostly regionals like First Bank System), but the money center banks had weak ratings. Within the energy category, the ratings were neutral. In virtually every case, the energy stock ratings had been improving since December. By the end of August, the top 10% of the Manager universe had risen 12.2% versus a 1.2% gain for the market. More important, 66% of the top stocks outperformed the market. Many energy issues were up 50% or more. Overall, there was a 32% chance of finding a stock that gained 20% or more within the top group.

Value and Timeliness

When using the Value and Timeliness indicators together, the normal pattern is to find strong Timeliness and poor Value or weak Timeliness and good Value. At any time, a large percentage of strong stocks will not be attractive from a Value perspective. Often, it is tempting to purchase such issues because they are popular and the publicity is favorable. However, in spite of their strong price trends, expensive stocks should be avoided because they underperform the market as a group. This does not imply that an exploited favorite cannot perform well. It's just that the odds are against it.

Typically, a large percentage of cheap stocks will have weak Timeliness ratings. As a stock loses investment favor and its price declines, the Value indicator becomes progressively more positive. Cheap stocks have an enormous statistical advantage over expensive stocks. Nonetheless, there is little incentive to invest in an issue with a weak Timeliness rating unless you have a long term investment horizon and a willingness to speculate that "enough is enough."

The best opportunities exist when there are deviations from the expected pattern. Thus, a cheap stock with a strong Timeliness rating offers significant upside potential and the confidence that investors are beginning to rediscover the issue. Similarly, an expensive stock with a weak Timeliness rating often declines significantly as investors recognize that the trend has turned negative. In either case, the odds are favorable because you are anticipating a major shift in crowd psychology rather than acting after the shift has occurred.

When you buy an expensive stock that is strong or short a cheap stock that is weak, the odds are unfavorable because the positives or negatives are well known. To act after a major shift in crowd psychology has become apparent is to assume that other investors have not recognized the implications of good or bad news, or that forthcoming developments will be better or worse than expected. For

lack of a more imaginative term, we will call such a strategy the "greater fool" theory of investing because it assumes that other investors are ill-informed or act slowly. Fortunately, the greater fool strategy is successful in a sufficient number of cases to convince many investors to adopt it.

Some investors have asked whether our semi-contrarian approach will be defeated because contrarianism is becoming "popular". In our view, contrarianism is a productive basic strategy because there will always be a sufficient number of adherents to the greater fool theory, whether they know it or not.

All the available evidence on the stock market indicates that it is sophisticated and efficient. The only real opportunity to produce superior investment returns comes from identifying, analyzing and investing in the situations which deviate from the expected pattern.

Chapter 3

Decisions In Practice

Neglected Stocks

Normally, a neglected stock has suffered a major decline. As investors focus elsewhere, trading volume recedes and the price fluctuates in a relatively narrow range. Sometimes, this process of consolidation can last for years. In a bull market, the Timeliness rating will be neutral or weak because the stock is lagging behind the market. In a bear market, the Timeliness rating will be neutral or strong since the stock is steady while most stocks are declining. In either case, institutional ownership will have declined markedly.

In bear markets, the leadership for the next bull market can often be found among neglected issues. Strong Timeliness ratings provide justification for a commitment even if one isn't certain that the bear market has run its course.

In a bull market, a commitment in a neglected stock should be made ONLY if the stock is in an uptrend. Occasionally, a neglected stock may sit out an entire bull market (e.g. food stocks during the 1975-80 period). Even though a stock is exhibiting substantial upside potential, you can afford to wait for concrete evidence of an uptrend before acting. A move from established downtrend to early uptrend is an example.

As a stock is discovered, the Timeliness rating should improve. The Value indicator will weaken. Since you expect the Timeliness indicator to improve, be alert for any deterioration. Normally, the chances of deterioration are greatest when a stock's Value rating slips to 5 or 6 or the stock approaches its target value. Note that these are checkpoints. Do not take action simply because a stock has reached one of them. Monitor the stock carefully to see how it is performing at this critical juncture.

A Value Rating Which Is Only Average

A Value rank of 5 or 6 implies that a stock is only average in terms of appreciation potential. Investors have discovered the stock, but psychology hasn't reached an extreme. Thus, one would expect it to perform in line with the market rather than to lead the market. Sometimes, a market correction can cause such a stock to retreat sharply. In such an event, you will be forced to make a judgment regarding the permanence of the deterioration in Timeliness.

Several factors should be considered. In the late stages of a bull market, when most stocks are trading at or above their target values, take your profits. Your objective is to gradually remove money from the market rather than speculate that the trend will improve again. In the late stages of a bull market, monitor a stock's industry group. Sell if the stock is much weaker than its group or if the group itself deteriorates significantly. If the Timeliness rating remains strong during a bull market correction, a stock is a strong candidate to move higher once the bull market resumes.

Target Price

When a stock approaches its target value, you should be even more vigilant. A change to an early downtrend (4) is a strong sell signal, because stocks have a tendency to lose momentum when they approach their price targets. Although a target value is just an estimate, experience indicates that the reward-risk ratio is no longer favorable when a stock price reaches its target. If you suspect that the general market is ripe for a correction, you may wish to take profits without waiting for a deterioration in the Timeliness rating. This applies particularly to stocks that have risen 25% or more within a period of a few weeks.

As a general rule, few stocks will be able to rise significantly above their target values early in a bull market. Once a bull market matures, however, market leadership narrows. Investors focus increasingly on the favorites. By the final stages of a bull market, leadership has become so concentrated that only the favorites continue to rise, while the majority of issues languish or decline. Historically, bull markets have carried the favorites to significant premiums. For this reason, selling as soon as a stock reaches its Target Value can be a mistake. An even greater mistake is to disregard the Value indicator entirely. When a stock reaches its Target Value, the rewards and risks are in balance. The conservative investor may wish to close out his/her position. The aggressive investor will be inclined to allow the market's enthusiasm to work in his/her behalf.

The Timeliness rating becomes the focal point if you decide to hold. As long as a stock is strong, the odds are in your favor. Monitor the trend with the Timeliness indicator and other short term timing tools at your disposal. A Timeliness rating of 1 or 2 is positive, but shorter term indicators will uncover deterioration sooner. CAUTION: The risk increases the further a stock rises above its Target Value. Only you can decide when the risks become intolerable.

The Maverick gives the ability to measure risk and the perspective to

act intelligently. If you follow the price trend alone, you are at the mercy of the market. Use stop-loss orders to protect profits. Buying a put is an alternative if your holding period is 6 months or less (see 'Options' in this chapter).

Exploited Stocks

A stock is exploited when virtually everyone who is likely to buy has already taken a position. Generally, you will find that institutional ownership jumps most sharply in the late discovery stage or when a stock has become exploited. Moreover, it often continues to increase in the early reappraisal stage because the stock looks cheap.

Exploited stocks often appear to be consolidating their recent gains. Market analysts may advise you to buy during this period of essentially sideways price movement in anticipation of another leg up in the price trend. You will ignore such advice because it is given without the perspective of the Maverick's Value indicator.

Secondary Companies

Search for laggards within the same industry if you judge that the bull market is relatively young. Generally, the leading companies within an industry perform best early in a bull market. The leaders are discovered first. As a bull market matures, the secondary companies catch up. Usually, there is significantly lower institutional ownership in secondary companies. This will change as the industry gains prominence.

This strategy assumes that the industry as a whole will gain recognition. Think about the investment themes that will capture the imagination of investors. For example, virtually any stock even vaguely associated with energy performed well in the 1975-80 bull market. There are no simple rules for identifying favored industries. Our newsletter helps with such judgments.

Act decisively if there is deterioration in an exploited stock in a mature bull market. Holding an exploited stock is extremely dangerous. Often, these issues decline so precipitously that even a stop-loss order is poor protection.

Short Selling

Normally, most stocks trade above their Target Values in the final stages of a bull market. This is the best time to start looking for short sale candidates.

Experience indicates that stocks can decline rapidly. Disappointments often cause a stock to lose as much ground in one trading session as it has gained in several months. This is particularly true with over-exploited issues. Also, the period of consolidation for exploited issues is much shorter than that for neglected issues. While it is possible for a neglected issue to sit out an entire bull market, exploited issues rarely escape unscathed in a bear market.

Exploited issues often perform much better than other stocks in the final stages of a bull market. Thus, wait until the Timeliness rating begins to deteriorate before establishing a position. The primary factor to consider in short selling is the general market trend. Unless you expect the market to decline, short positions should be established only in issues which are weak. In the final stages of a bull market, group analysis can be beneficial. You can be more confident in shorting an exploited stock if its industry group is eroding.

Reappraisal

In any given industry, the secondary companies decline more severely than the leaders in a bear market. Whereas secondary companies lag behind the leaders in a bull market, they frequently react first in a bear market.

As a bear market matures, the industry leaders often begin to bottom while the secondary issues continue to decline. Institutional investors, in particular, tend to eliminate the secondary issues in a group which is being reappraised. This desire to sell low quality stocks can cause them to erode well after a new bull market has begun.

Since it takes so long for an industry to regain favor after a major reappraisal, your greatest enemy as a short seller is the buyout. When investors and companies have grown accustomed to a particular price, it seems cheap after a decline. Unfortunately, the Timeliness indicator will not alert you to buyouts unless the acquiring company accumulates the stock over a long enough period to stabilize the market.

Merely because a stock reaches its Target Value on the downside does not imply that you should close out your position. If the Timeliness rating continues weak, hold on, particularly if you believe that the bear market is young. Experience indicates that stocks in reappraisal can move well below their Target Value.

Bear market rallies present the same problem as corrections within a bull market. Your judgment is critical. As long as a stock remains in a downtrend, maintain your position. Late in the reappraisal cycle, less

evidence is required to close out short positions and begin searching for buy candidates.

Evaluating Recommendations

The Maverick is an excellent tool for evaluating the advice of reliable brokers, market letters and services. No matter how independent you are, tap these sources for new ideas and make them work for you.

Recognize from the start that you are not the first to be informed of an opportunity. The recommendation itself indicates that someone has discovered the stock. As a result, the burden is on you to determine how far along the stock is in the discovery stage. The Maverick provides the capability to investigate the top recommendations of several leading brokerage firms. Or, you can create a portfolio of the ideas you receive and analyze them from a Value and Timeliness perspective.

Most Wall Street sources are oriented toward identifying a favorable trend. Some sources focus on the trend of a company's sales, market share and earnings. Still others focus on the trend of a stock's price. In any case, if a stock is recommended, you can assume that the trend is favorable. Use the Maverick's Value indicator to discover whether or not the stock price is reflecting the favorable outlook. If the stock is in the early discovery stage, you will be inclined to make a commitment. Early discovery stage recommendations are likely to be successful.

One reason is that the sponsorship of the source recommending an issue itself raises the chances of having a winner. No organization's sponsorship is felt immediately. In the case of a brokerage firm, some registered representatives do not recommend the stock initially. Assuming the story remains intact, they may recommend the issue on price pullbacks. And, not all customers of a letter or service buy immediately, though they might well purchase later when the recommendation is reiterated.

Sponsorship, therefore, is a vital ingredient of investment success provided the stock has not been exploited by the time you hear of it. In general, avoid stocks in the late discovery stage unless you are able to speculate that sponsorship will carry the stock beyond a rational level. If so, be extremely vigilant over the short term price trend. You have a distinct advantage over other investors in that you are aware of the risks you are taking.

Occasionally, a recommendation is made because the source believes a stock is cheap. For example, one major brokerage firm was recommending oil service stocks in 1981 while they were in the reappraisal stage. The trend was negative, but the firm felt the stocks

were cheap. Clearly, it does little good to screen such recommendations with the Value indicator - it will probably yield the same answer.

Check every idea with the Timeliness indicator. If the stock is in a downtrend, there is no incentive to get involved. With any new idea, use the Value indicator to make sure that you aren't the last one to climb on board. Use the Timeliness indicator to avoid getting sandbagged by a stock in the late stages of reappraisal.

General Market

The foregoing discussion of a stock's price cycle contains several references to the trend of the overall market because the direction of the market is the single most important influence on individual stock price movement. Your evaluation of individual stocks will always depend on your assessment of the market trend.

Some market analysts attempt to forecast short term swings within the market. History proves that their efforts are wasted because the market responds differently to a given set of factors at different times. Rarely, if ever, has an analyst or system been correct more than a few times consecutively. For this reason, concentrate on the primary trend of the market. If you are correct about the primary trend, short term reversals can be tolerated. Since bull or bear markets can last for several years, your main objective will be to identify the major turning points.

In the late stages of a bull market, the majority of stocks will be trading above their Target Values. Generally, if 50% or more of the Manager stocks have negative upside potential, you should begin to get cautious. Do not close out your long positions just because 50% of the stocks are fully priced, but monitor your holdings carefully.

In the final stages of a bear market, the vast majority of issues will be trading below their Target Values. Generally, you should become bullish when 85% or more of the Manager stocks have positive potential. Again, monitor prospective investments closely for signs of improving Timeliness ratings.

Why do so many stocks become cheap at the end of a bear market while only a small majority become expensive in a bull market? As mentioned earlier, leadership tends to narrow in a bull market. Investors focus increasingly on the favorites, while other stocks are ignored. Often, many stocks begin to decline in the final stages of a bull market, while the leaders continue to advance. In a bear market, virtually every stock declines eventually. Bear markets take few hostages. As a result, you should expect the vast majority of issues to decline below their Target Values. For example, 89% of the Manager

stocks had positive potential in July, 1982, in the final stages of a bear market.

In monitoring the trend of the market, be sensitive to divergences. Normally, the top 10% (Value rating of 1) performs better than the bottom 10% (rating 10). Thus, be alert to the occasions when the top 10% lags behind the bottom 10%. Over the last 10 years, a prolonged period of superior performance by the bottom 10% has been a signal that the market trend is about to change.

Because leadership narrows in a bull market, the cheapest stocks will eventually underperform the most expensive stocks. If this occurs for three months or more, the odds are extremely high that the market trend will change within 3-6 months. Your conclusion will be reinforced further if the majority of stocks are trading above their price targets. Close out your long positions at the slightest sign of weakness, and begin investigating short sale candidates.

In a bear market, the cheapest stocks (e.g. those ignored during the prior bull market) normally hold up well. In fact, the cheap stocks often perform best on a relative basis during a bear market. For example, the consumer issues (top 10%) actually rose during the 1980-82 bear market. In the final stages of a bear market, however, even the cheap stocks decline. Having performed well to date, they are the most obvious targets as bear market psychology reaches an extreme. This sub par performance by the cheapest stocks is often a clue that the bear market is ending. For example, the top 10% (Value rank of 1) performed poorly from April to July, 1982.

The number of Manager stocks with positive and negative potential is reported monthly in our newsletter. When appropriate, the performance of the top and bottom 10% is also noted.

Industry Groups

The second most important influence on an individual stock is the behavior of its industry group. Stocks within an industry tend to move in the same direction. Forces such as government regulations, increased competition and changes in demand impact all industry participants.

Investors are fond of dealing in broad concepts. In the 1975-80 bull market, the concept was energy. Virtually every stock with even the slightest exposure to energy became popular. Early in the market's discovery of energy, the strongest companies benefited. Later, as the bull market matured, second tier stocks advanced sharply as investors searched for new plays in the energy field.

Every bull market has its concepts. One of your tasks is to identify them. Normally, the first leg of a bull market is a broad advance. Most stocks participate. As the bull market gains power, even the neglected laggards will bounce off the bottom. For this reason, it is difficult to identify the enduring market leadership early in a bull market. Often, the true leadership begins to become visible after a bull market suffers its first correction. In most instances, the real leaders are the first stocks to make new highs once the correction is over.

A study of industry groups can be beneficial. Your first task is to identify the industry leaders. The Maverick's Quality rating is useful for this purpose. Normally, the strongest, most consistent companies within an industry will enjoy the highest Quality ratings. In analyzing industry trends, be aware of the "normal" pattern, and be alert to deviations from it. In a neglected group, even the industry leaders are cheap. Since the industry leaders normally perform best off the bottom, you will focus on them. Relative uptrends are most likely to show up first in the leaders.

Once a group enters the discovery stage, the Timeliness ratings should be strong or neutral for all participants in the industry. You should be suspicious if only one company in a group is moving. Short of a buyout or merger, sustained movement by a stock independent of its industry is very unlikely.

In a bull market correction, expect the secondary companies within a group to be affected the most. Again, it is important to focus on the industry leaders. If their Timeliness ratings become weak, more time may be required before the group experiences a major markup. If the leaders hold well in the correction, you can be more confident that you have identified a strong group.

When a group is well along in the process of discovery, expect the industry leaders to become exploited first. By this time, the industry should be receiving frequent mention in the financial press, in such columns as "Heard on the Street" in *The Wall Street Journal* or "The Trader" in *Barron's*. Look for evidence that an industry group is reaching the concept stage. If so, you may invest in the industry laggards on the assumption that they, too, will become popular.

One of the surest signs that an industry has been exploited is if the secondary companies within the industry are expensive. Since the secondary companies often lead an industry on the downside, focus your attention on them. Short positions should await tangible evidence of a downtrend, however.

In summary, evaluate an individual stock in the context of its industry. Often, a recommended stock from a broker or investment

service will trigger an overall industry analysis. On further investigation, you may choose to buy a completely different issue (within the same industry) if you agree with the basic concept.

Managing Your Portfolio

Diversification

Generally, your risk decreases as the number of stocks in your portfolio increases. With an 8 stock portfolio, you can achieve roughly 80% of the possible benefits of diversification. With a 16 stock portfolio, you achieve 90% of the maximum benefit (see Fisher and Lorie, *The Journal of Business,* XLIII, No. 2 (April, 1970, Pp. 99-134).

Thus, a 10-16 stock portfolio provides adequate diversification, provided you don't own more than one company in a given industry. If you plan to concentrate in an industry, increase the number of issues in your portfolio.

Balance

Another way of measuring diversification is to identify the strategies being pursued in your portfolio. An aggressive strategy is to buy only stocks with above average Value ranks (1-5) and strong Timeliness ratings (1 or 2). At any given time, few stocks may qualify. The purpose of this strategy is to concentrate in the issues with the greatest probability of performing on the upside. It is appropriate in a strong bull market. Since these stocks normally perform best in a rising market, they can suffer from heavy selling pressure if a correction occurs. The aggressive strategy has a time horizon of up to 6 months.

A conservative approach is to focus on stocks in the neglected or early discovery stage (Value of 1 or 2). Focus on stocks that are in uptrends (1-3). Occasionally, these issues lag behind the market in a strong uptrend. However, when a correction occurs, they refuse to retreat or actually gain ground. The conservative approach has a time horizon of one year.

For these reasons, it is useful to have a blend of strategies in your portfolio. Certain issues perform different tasks at different times. With a balanced portfolio, you should expect more consistent results over time.

Establishing Objectives

When you invest in a stock, make note of the reasons for your commitment. This will help you decide what to do with the investment

at a future date. Generally, if one of your major reasons for making an investment changes, you should reevaluate your position.

For example, we recommended Mellon National in February, 1983. The stock appeared to be in the discovery stage. The upside potential was significant. The Timeliness rating was 2. Moreover, a major brokerage firm expected the earnings to expand sharply. By October, it became apparent that the earnings would not rebound. We removed the stock from the list because the key reason for expecting the stock to perform was no longer valid.

If a stock performs as expected, your reason for continuing to hold the investment may be different from the reason for your initial commitment. For example, you might decide to retain a position only if the Timeliness rating remains strong. Over time, the practice of noting the reasons for making an investment will pay large dividends. It will help you act more decisively when conditions change.

Options

This section makes some general observations concerning options for the experienced trader. Specific strategies may be discussed, but not defined. If you are inexperienced in options, a good book on the subject will provide needed background. One suggestion: *Options As a Strategic Investment*, Lawrence McMillan, New York Institute of Finance, 1980.

The purpose of the Maverick is to help you evaluate where a stock is in its price cycle. This provides valuable perspective for an option trader. Knowing whether a stock is early of late within the discovery or reappraisal stages in itself suggests various strategies.

Time

The Maverick's Value indicator has a time horizon of approximately one year. The Timeliness indicator has a time horizon of up to 6 months. When the two indicators are combined, the time horizon is similar to that of the Timeliness indicator alone. As a result, the Maverick will be most useful to intermediate or longer term option traders.

Basic Call and Put Strategies

Most option strategies focus on the discovery or reappraisal stages, where the probability of movement is greatest. A bullish position seeks strong Timeliness ratings, and reasonable upside potential. When a

stock has become exploited, the odds are unfavorable. Whereas the long term investor concentrates on the top 20% in terms of value, the option trader may wish to search deeper. A broad search might identify all stocks with a Value rank of 1-5, Timeliness of 1-2 and an option of 1. (An option of 1 means that there is a listed option for the stock.) Analyze the resulting printout using the short term timing tools at your disposal. Look for at least 20% upside potential in an underlying stock. When a stock is within 10% of its Target Value, it is fairly priced.

A bearish strategy seeks weak Timeliness ratings in stocks which are below average in terms of value. A broad search might designate a Value of 6-10, Timeliness of 5-6 and an option of 1. Analyze the stocks found from a short term timing perspective. Issues with 20% or more downside risk are particularly vulnerable in a market correction.

The Market

For an option trader, the near term direction of the general market is critical. A long term investor can profit from a knowledge of the primary trend. To the option trader, the primary trend is useful for broad perspective, but bull market corrections and bear market rallies can play havoc with Timeliness ratings. You should, therefore, recognize that your judgment regarding the short term market trend will be crucial to your success.

Covered Call Writing

The Maverick can be useful for identifying potential opportunities to write calls against a long position. Generally, neglected stocks represent ideal candidates. A cheap stock that has suffered a significant correction will normally consolidate for a time before rising again. This period of essentially sideways movement provides a window for writing covered calls.

Look for stocks that are extremely cheap. This limits your downside risk. A minimum of 50-75% upside should be expected. The Timeliness rating should be neutral. Use the Timeliness rating to exclude candidates that haven't stopped declining, and to avoid issues that are beginning to break out on the upside.

Naked Call Writing

This strategy is risky. Generally, it is inappropriate if you expect a stock to suffer a significant decline. The best candidates have very low chances of rising. If you decide to pursue this strategy, focus on stocks in the late reappraisal stage, with a Timeliness rating of 5-6. The market trend should be negative. Naked writing isn't recommended for most

traders since the loss on one trade can cancel the profits realized on several transactions.

Establishing Positions

Late in a bear market, it can be advantageous to buy calls in stocks with strong Timeliness ratings and big upside potential. You may not be certain that the bear market is over, but you don't want to miss the first leg of a bull market. In this fashion, positions can be established with a small proportion of your capital. Later, the calls can be exercised if the market rallies and you wish to maintain long positions.

Buying a Put When The Stock is Owned

Puts can be appropriate when a stock is in its late discovery stage in a mature bull market. The Timeliness rating should be 1 or 2. If the stock is in a downtrend, consider selling the stock outright, unless the holding period is approaching one year.

A put provides protection on the downside. It is a useful alternative to a stop-loss order. If the stock remains strong, you will participate on the upside. However, you have an insurance policy if the stock reverses. Keep in mind that your holding period for tax purposes is wiped out if you buy a put when you are a short term holder of a stock. The holding period for the stock will commence when the put is sold. As a result, this strategy is best suited to positions with holding periods of 6 months or less.

Taxes

Currently, the tax structure favors the investor who generates long term capital gains. The margin depends on your tax bracket. A 20% bracket investor must produce a 15% higher average return in order to achieve the same after tax return as a long term investor. In the 50% bracket, the short term investor must generate a 60% higher average return.

In marginal situations, tax considerations can and should influence investment decisions. For example, what do you do if you have held an issue for 11 months and it is in a downtrend in the late discovery stage? As mentioned earlier, buying a put provides insurance, but you will forfeit the 11 months accumulated for your holding period. If the general market is strong, the best strategy is to write a covered call even though it will provide only limited protection. In a faltering market, the best choice may be to close out your position even though it will result in a short term gain.

Conclusion

Experienced investors know that success depends on a realistic assessment of the risks and rewards of a prospective investment. Unlike Las Vegas, the odds aren't stacked against you in the stock market. In fact, an intelligent approach to identifying opportunities can raise the odds above 50%. Even a modest advantage will produce satisfactory results over a period of several years.

Aggressive investors quite properly focus on the near term trend. A long term value is interesting only to the extent that something will cause the stock to perform in the near future. Unfortunately, many investors believe that any stock with a strong trend is attractive. This ignores the fact that the probability of the trend continuing declines as a stock is discovered. Exploited stocks as a group consistently underperform the market. Of course, some do make new highs. This does not alter the fact that the odds are against you when you buy an exploited stock.

Aggressive investors should use the Maverick to identify stocks with strong Timeliness ratings and moderate to significant appreciation potential. Those candidates should then be screened using the short term timing aids at your disposal. In particular, look for signs that the trend is beginning to deteriorate. The Timeliness rating is most reliable as long as the general market trend remains intact. Market reversals can cause Timeliness ratings to change abruptly. Consequently, you cannot ignore the market when making short term investment decisions.

Long term investors seek substantial capital gains. Often, the best possibilities come in stocks which are neglected by the market. As a group, cheap stocks consistently outpace the market. When you concentrate in cheap stocks, the odds are in your favor. The chief risk in cheap stocks is that any particular issue may not have completed its reappraisal stage. For this reason, weak Timeliness ratings should be avoided. Identify stocks with substantial upside potential and relative uptrends. These stocks have an excellent chance of performing better than the market over the next year. In analyzing the list, look for industry concentrations. Where an entire industry is neglected, you can be more certain that a genuine opportunity exists. In particular, examine the industry leaders. If they are in uptrends, investors may be returning to the group. What-If analysis is helpful in measuring the margin of safety in a prospective commitment.

The Maverick permits you to intelligently balance Value and Timeliness in your decisions. Value alone is useless if you buy too early. Timing alone is useless if you buy too late. With both perspectives, you have a much better chance of buying the right stock at the right time.

Chapter 4

Indicators

The indicators are individually discussed in order of appearance on the Search screen. This chapter supplies basic information regarding each indicator and its usefulness.

A discussion of the Value inputs and sources for evaluating non-Manager stocks is contained in Chapter 5.

Value

The Value indicator is based on a model designed to calculate an appropriate price-earnings ratio (P/E) for a stock. Once a P/E has been obtained, it is multiplied by estimated earnings for the next year to produce a Target Value. By comparing the Target Value with the current price, the Manager stocks are ranked in terms of upside (or downside) potential. See Chapter 6 for more detail on the Value model.

The top 10% of the ranked list is assigned a rank of 1, the second 10% a rank of 2... and the bottom 10% a rank of 10.

Range: 1-10

Search for the bottom 10% by entering 10 for Value. If you wish to isolate the top 30%, enter 1-3 for Value.

Purpose:

The Value indicator defines a stock's vertical position within its price cycle (see Price Cycle Chart, Chapter 2). In the ten years since the performance of the Value indicator has been measured, the top stocks have consistently outperformed the bottom stocks.

	% Change 12/31/73 to 12/30/83
Top 10% (Rank of 1)	+313.3%
Bottom 10% (Rank of 10)	- 4.0%
S&P 500	+ 74.3%

While past performance is not necessarily indicative of future results, available evidence strongly suggests that cheap stocks perform much better than expensive stocks.

Strength:

The Value indicator identifies extremes in crowd psychology.

Extremes are created because most investors follow the trend. Unfortunately, trends are often reversed once psychology reaches an extreme. The Value indicator helps you evaluate the probability that a trend will continue and anticipate changes in the trend.

Weakness:

The Value indicator tends to be early in identifying potential opportunites. Being early is a virtue, but being too early can be a curse. Anticipating change is futile without evidence that change is beginning to occur. Timing is needed to confirm a change in trend.

Timeliness
(abbr. TIMLINES and TIMELY)

The Timeliness rating measures the trend of a stock's price compared with the market.

The Timeliness indicator provides insights into which stocks are gaining or losing favor among investors. Often, a shift in psychology will manifest itself in the relative price before a pattern is evident with the trading history of the absolute price alone. The Timeliness rating scale is shown below:

Strong	1	Established Uptrend
	2	Confirmed Uptrend
Neutral	3	Early Uptrend
	4	Early Downtrend
Weak	5	Confirmed Downtrend
	6	Established Downtrend

Range: 1 - 6

Search for stocks in an established uptrend by entering 1 for TIMLINES. If you wish to identify all strong stocks, enter '1-2' for TIMLINES.

Purpose:

The Timeliness rating indicates if investor psychology is positive or negative (see Price Cycle Chart, Chapter 2). Knowing whether a stock is being discovered or being reappraised is essential in making decisions. Experience indicates that strong stocks are likely to perform better than weak stocks over the near term.

Strength:

The Timeliness rating monitors psychology. Once a trend is established, it is likely to continue. Investing contrary to a trend can be an expensive experience. From a trading perspective, it is essential to be in tune with the market.

Weakness:

The Timeliness rating tends to be late in identifying opportunities. Normally, a stock must advance or decline significantly before a trend is established. Thus, it is possible to make an investment just as the trend is altering course. This is particularly true when investor psychology reaches an extreme. Following a trend is futile without insight into how psychology is reflected in the current price. Value is necessary to measure the probability that a trend will continue.

EPS Growth
(abbr. EPS GROW and GROW)

The earnings growth estimates in the Manager are consensus forecasts for the next 5 years. Since the consensus is an average of Wall Street analysts expectations, it is in the ballpark more consistently than individual forecasts. However, expect the consensus to change relatively slowly.

Range: 1 - 60

Search for stocks that are expected to grow at 30% or more by entering 30-60 for EPS GROW.

Purpose:

Most investors know that growth stocks offer substantial opportunities. This indicator permits you to quickly isolate the growth issues within the Manager. Use Value and Timeliness to identify the most attractive candidates.

Industry analysis is useful for arriving at a ballpark growth forecast for a non-Manager stock.

EPS Volatility (abbr. VOL'TY)

Earnings volatility measures the predictability of a company's earnings. The lower the volatility estimate, the more stable and predictable a company's earnings. Companies with big earnings fluctuations have high volatility estimates.

Range: 1 - 45

If you wish to concentrate on stocks with stable earnings, enter 1-15 for VOL'TY. High volatility stocks can be isolated by entering 35-45.

Purpose:

Volatility is used as an input in the Value model. There is substantial evidence that investors assign higher price-earnings ratios to stocks with stable earnings patterns. When analyzing a non-Manager stock, examine the volatility estimates in the stocks' industry group for comparative purposes. Conservative investors may elect to search the Manager for low volatility issues. Toward the end of a recession, high earnings volatility stocks often offer the best opportunities.

Note that the earnings volatility estimate is not a substitute for price volatility. Option traders should use another source for identifying stocks that are likely to have significant price swings.

Quality (abbr. QUALTY)

The Quality rating measures long term debt as a percentage of total capital and the consistency of a company's earnings and dividend record. A rating of 1 is highest, while a rating of 7 is lowest. A stock of average quality has a rating of 4. A zero (Ø) indicates that a rating is under review.

Range: 1 - 7

To identify stocks with above average Quality, enter 1-3 for QUALTY. Below average Quality can be isolated by entering 5-7.

Purpose:

The Quality rating is useful for quantifying the fundamental risk in a prospective investment. The Quality rating also serves to identify the leading companies within an industry. Valuable insights can be gained by monitoring the leaders in an industry group, as mentioned in the discussion of the typical stock's price cycle. Generally, the leaders in an industry will have the best Quality ratings.

Institutional Ownership (abbr. OWNERSHP and OWNRSP)

Ownership is the percentage of a company's outstanding stock held by institutions. The average Ownership for all stocks is approximately 35%. Often, the best time to buy a stock is when Institutional

Ownership is relatively low (10-25%). Excessive ownership (50% or more) can cause a stock to react sharply to adverse news developments. Very low ownership (less than 10%) may be undesirable because a stock lacks sufficient sponsorship.

The ownership indicator has a scale from 1 - 9 as follows:

Rating	% Institutional Ownership
1	Less than 10%
2	10 - 15%
3	15 - 25%
4	25 - 35%
5	35 - 40%
6	40 - 50%
7	50 - 60%
8	60 - 70%
9	70% or More

With the exception of the last designation, the upper limit of each range refers to any number smaller than the limit. For example, a rating of 6 includes numbers greater than or equal to 40% but less than 50%.

Range: 1 - 9

In order to isolate stocks with Institutional Ownership of 10 to 25%, enter 2-3 for OWNERSHP. Stocks with less than 10% ownership can be found by entering 1.

Purpose:

Normally, Institutional Ownership is highest when a stock is exploited, and lowest when a stock is neglected. Excessively low or high Institutional Ownership is a negative. Low ownership means low sponsorship. When institutions have conviction in a company, they tend to accumulate positions over long periods. This lends vital support to an issue. However, over-ownership can trigger a selling panic on unfavorable news.

Ownership analysis is useful when you are examining an industry. Generally, the industry leaders will have higher institutional interest. When you have identified an industry which appears attractive, the stocks with relatively low institutional ownership represent investment opportunities.

The weakness of monitoring institutional ownership is that there are no absolute standards. What is a high ownership percentage for one stock may be a low percentage for another stock. For example, IBM's

ownership may fluctuate in a different range from Storage Technology's. Ideally, one should have a different standard for each company. Clearly, that is not practical. Some investors believe that low ownership is, in itself, a desirable characteristic. This is truer in some market environments than in others. Overall, some judgment is required in putting ownership to profitable use.

Sector

The Manager stocks are divided into 11 broad economic sectors:

Sector	Category
1	Consumer Staples
2	Consumer Cyclical
3	Health Care
4	Technology
5	Energy
6	Basic Materials
7	Industrial Manufacturing
8	Services
9	Financial
10	Transportation
11	Utilities

Range: 1 - 11

You can search for up to two (2) Sectors at one time. If you wish to search for all energy stocks, enter 5. To isolate both consumer staples and consumer cyclicals, enter 1 for your 1st designation and 2 for your 2nd choice. When an industry is designated, you will not be able to select a Sector.

Purpose:

The Sector value allows you to isolate all stocks in a broad area of interest quickly. For example, new products can make industry classification difficult in a Sector such as technology.

Industry (abbr. INDUST)

The Manager stocks are divided into 157 industry groups. A detailed listing is included in your Maverick program package. As the need arises, new industry groups may be created. Notice of such changes will be included in the newsletter.

Range: 1 - 157

Up to five (5) Industry groups can be designated in a search. Enter your choices one by one in response to the prompt for your next selection. When a sector is designated in a search, you will not be able to select an industry.

If you are examining a single industry, simply enter the number for the industry of interest.

Purpose:

As indicated in the price cycle discussion, industry analysis can be very valuable in investment decision making. Further, it is often useful to examine an industry when you are generating the Value inputs for a non-Manager stock.

Option

The Manager contains a designation of whether or not listed options are available for a given stock.

Range: Ø or 1

To isolate stocks with options, enter 1. If you are indifferent to whether an option trades for a stock, enter Ø.

Brokerage Recommendations (abbr. RECOMEND and RECOM)

The Recommendations indicator identifies some of the top choices of several brokerage firms for the next year. Merely because a stock is not included, does not mean that no one is recommending it. Our indicator is not an all inclusive survey of Street recommendations. We consider the credibility of the source prior to including a particular recommendation. However, we do not attempt to pass judgment on the validity of the idea.

Range: Ø or 1

To isolate the recommendations, enter 1. An entry of Ø means that recommendations will not be considered.

Purpose:

The Recommendation indicator gives you some of the best ideas on Wall Street. Sponsorship is a vital ingredient of investment success. (See Evaluating Recommendations, Chapter 3.) Recent studies provide

strong evidence that these recommendations substantially outperform the market.

Strength:

Wall Street analysts are very adept at identifying trends and distilling the myriad of factors affecting an industry into individual stock recommendations. The best situated companies within an industry consistently outperform the industry as a whole.

Weakness:

Analysts lack crystal balls. Their ideas depend on an extrapolation of recent trends rather than an ability to forecast the future. Analysts often fail to ascertain whether their opinions are already reflected in a stock's price. Use the Value indicator to eliminate the discovered or exploited issues.

Further, analysts are often insensitive to what the market is telling us about a particular stock. Use the Timeliness indicator to eliminate the issues that are deteriorating.

Chapter 5

Non-Manager Stocks

Value Inputs

The Maverick's Value model is capable of evaluating stocks that are not in the Manager. Your task will be to produce the four estimates required by the model. The primary objective will be to get into the "ballpark." For example, if the true growth rate for XYZ is 17%, you will be in the ballpark if you use a 14 - 20% growth forecast. Employing a forecast of 30% will not produce satisfactory results.

Experience indicates that the model is relatively forgiving. Major opportunities or risks can be identified even if your estimates are not perfect. However, you should be alert to numbers that do not make any sense in the context of what you know about a company and its industry. When you produce your own estimates, use the Sensitivity program to support your conclusions.

EPS Growth Rate - Range: 1 - 60

The earnings (EPS) growth rate is a forecast of the annual rate at which a stock's earnings will expand over the next 5 years. Often, services will forecast earnings over a 3 - 5 year period. This is sufficient for the Value model.

Historic earnings growth rates are poor guides to future growth potential. Growth forecasts are available from the Value Line Investment Survey, selected brokers and some market letters. In general, you can assume that these estimates are useful in direct proportion to the stability of a company's earnings over time. Thus, forecasts for growth stocks are more likely to be in the ballpark than forecasts for companies where earnings are sensitive to fluctuations in the economy.

For example, assume that a recession has caused XYZ's earnings to decline from a peak of $3.00 (3 years ago) to $0.50. An analyst at Value Line believes that XYZ can earn $4.00 in the next economic expansion, 5 years from now. This equates to a 52% annual growth rate. Should you use a 52% projection in the Value model? The answer is no. The reason is that the growth has been calculated from a base of abnormally low earnings. If you were to calculate XYZ's growth from the previous peak of $3.00 to today, you would derive a negative growth

rate of 45%. Clearly, neither growth rate is very useful. How do you proceed from here?

When evaluating a non-Manager stock, your first task is to identify its industry group. Then, perform an industry analysis with the Search program. Examine the projected growth rates for other companies in the industry. This will help you double check projections from other services, or begin with a ballpark estimate of your own. Of course, you may shade your estimate to the high or low end of the industry range based on your knowledge of a specific company's prospects.

% EPS Paid Out in Dividends (Payout Ratio)

The dividend payout ratio is calculated by dividing a company's dividend by its earnings. For example, if a company is paying a $0.20 dividend and is earning $0.80 per share, its payout is 25%. If a company doesn't pay a dividend, its payout is zero (0). The acceptable range is 0 - 99.

To estimate a company's payout ratio, analyze the payout over the past several years. Note that large earnings fluctuations or dividend cuts can cause the payout in any particular year to vacillate widely. In your examination, give more weight to the recent years if a trend is apparent. The Value Line Investment Survey is an excellent source of historic payout information.

When you lack a dividend payout history, a satisfactory estimate can be obtained by dividing the current dividend by the average of last year's actual and this year's estimated earnings per share. For example, XYZ is paying a dividend of $1.20. Last year, XYZ earned $3.80 and the earnings estimate for the current year is $4.20. The average of the two (2) years earnings is $4.00. Thus, the estimated payout is 1.20 divided by 4.00 or 30%.

Normalized EPS

Earnings per share (EPS) estimates are available from a number of sources. The Dow Jones New Retrieval Service has a data base called "The Corporate Earnings Estimator," which contains consensus earnings estimates for over 2,000 companies. Access the "Earnings Estimator" by typing //EARNS. Your brokerage firm will have an earnings estimate for any stock it recommends. Finally, the Value Line Investment Survey carries earnings estimates for 1,700 companies.

For a growth company whose earnings have been advancing,

obtaining an estimate is sufficient. You can ignore the word "normal" in such a case. Generally, by June, start using an estimate for the next year. For example, by June, 1983, the Manager switched from 1983 to 1984 estimates. This is necessary in order to be in step with the market. In the market, individual stocks normally reflect prospects for at least a year in advance. Since Value Line is tardy in reporting an estimate for the next year, the "Corporate Earnings Estimator" and brokers are priority sources.

For companies whose earnings fluctuate sharply over the economic cycle, or growth companies whose earnings have faltered, it is necessary to "normalize" earnings. Again, this is an effort to be in step with the market. When the economic cycle causes earnings to decline significantly, the market focuses on the earnings potential of a company rather than a depressed figure.

Normal earnings is the level of earnings that you would expect a company to achieve in the mid-point of an economic cycle. Neither the peak nor the trough earnings are representative. The simplest way to estimate normal earnings is to scan the record. Isolate the peak year, and concentrate on the two years prior to and after the peak. Average these 4 years to get a ballpark estimate of normal earnings.

For example, ALCOA's earnings deteriorated sharply over the 1980-82 recession. As of April, 1983, the consensus 1983 earnings estimate was $1.44 and the 1984 estimate was $3.58. Should either of these estimates have been used? Here is the record:

ALCOA EPS (1975 - 1982)

1982	(0.15)	1978	4.45
1981	3.97	1977	2.79
1980	6.54	1976	2.07
1979	7.15	1975	0.93

The peak earnings year was 1979. The average of earnings in 1977, 1978, 1980 and 1981 is $4.44. This normalized estimate is preferable to using either one of the estimates above. Interestingly, as of August, 1983, the consensus 1983 estimate had risen to $4.35. By employing a figure of $4.44, you would have been ahead of analysts' forecasts.

In the case of a growth stock which has suffered a temporary earnings setback, employ the peak earnings as your estimate until "Street" forecasts exceed your normal estimate. Then, switch to the estimates available at the time.

Earnings Volatility - Range: 0 - 45

Earnings volatility is defined as the deviation of earnings around a trendline. The more a company's earnings fluctuate, the less confident are investors that the stock will achieve what is estimated. The more consistent an earnings pattern, the more confident investors will be. The Maverick contains a calculator to help generate a ballpark volatility estimate. You must have 3-10 years of historical EPS data available to use the calculator. We suggest that a minimum of 5 years be used to achieve best results.

The market's volatility is defined as 25. Companies with greater than average earnings fluctuations will have a volatility estimate above 25. Stable companies will have an estimate below 25. It is useful to think of two 10 point gradations on either side of the market (25). Extremely volatile companies will have a volatility of 45, two deviations from average. Moderately volatile companies will have a volatility of 35. Conversely, the most predictable companies will have a volatility of 5, two deviations better than average. Moderately stable companies will have a volatility of 15. By thinking of these 5 categories of volatility, you will learn to make ballpark estimates without using the calculator. Simply observe the historical record and place a particular stock into one of the categories.

Of course, modify an historical estimate for recent corporate developments, where possible. For example, a sale of a money-losing division may cause a company's earnings to become less volatile.

As in the case of growth rates, useful information can be gleaned from industry analysis. Examine the volatility estimates in an industry to get a feel for an acceptable range.

Summary

Generating value inputs for non-Manager stocks is a relatively simple process if you are willing to learn how to do it. Over time, you will become adept at producing ballpark numbers. The record indicates that the investment of time can pay handsome dividends.

The dividend payout and the volatility estimates are easiest to produce. They are also less important in calculating a target value for a stock. Errors in these two estimates are thus less critical to your investment conclusions. Of course, if you employ a 70% payout instead of the proper figure of 20%, your conclusion will be impacted. Realistically, however, it is difficult to make errors of that magnitude. Whether the true payout is 15 or 25 will not significantly alter the target value.

The projected growth rate and estimated normal earnings are the most important value inputs. For this reason, concentrate on them. The most common error with the growth rate is to be unduly influenced by any particular period of strong or weak growth. You should think of the growth rate as the sustainable rate at which a company's earnings will expand long term. Adjust analysts' projections accordingly. The most common difficulty with earnings is illustrated by the ALCOA example above. As mentioned above, aim to get into the ballpark.

If you are successful in generating ballpark estimates, you can use the What-If feature of the Value model to draw a conclusion about a particular stock. Historically, genuine opportunities are not very sensitive to the inputs. Market psychology can swing to such an extreme that a stock remains cheap or expensive over a wide range of reasonable estimates. If a stock's attractiveness hinges on the difference betweeen a 30% or 35% growth rate, you should question the wisdom of making an investment.

Service

If help is needed with a particular stock or group of stocks, call (216) 338-6811. We will supply estimates where available. In order to minimize phone charges, the best procedure is to call with a list of names. Then, call again after an hour, and we will give you the numbers you need to evaluate a stock.

Timeliness

There are several excellent sources of timing information.

The Value Line Investment Survey

Published by Value Line, Inc., 711 Third Avenue, New York, NY10017. Value Line focuses on the trend of earnings and earnings surprises. The price trend is also considered. We believe that earnings are weighted much more heavily than the price. The Value Line rating system has produced a good record. Coverage: approximately 1,700 stocks. Subscription: $365 per year.

Long Term Values

Published by William O'Neil & Co., Inc., 11915 La Grange Avenue, Los Angeles, CA 90025. "Long Term Values" emphasizes industry group and individual relative price performance. The trend of reported earnings is also considered. Our research indicates that technical factors are weighted more heavily than the earnings trend. The service provides a ten year earnings history and current consensus earnings estimates. A

useful description of a company's business is also included. Given the breadth of coverage and the information provided, this service is an excellent companion to the Manager. Coverage: approximately 4,000 issues. Subscription: $195 per year.

Daily Graphs

Also published by William O'Neil & Co., Inc. Two editions are published: New York Stock Exchange/OTC and American Stock Exchange/OTC. "Daily Graphs" emphasizes the relative strength of a stock's price. Excellent charts are provided. This service is useful for making short term timing decisions and for in-depth study of stocks produced by a Manager search. One additional benefit of "Daily Graphs" is that consensus earnings estimates are reported for the current and next fiscal years. Coverage: New York Edition — about 1,600 stocks; American Edition — approximately 1,000 stocks. Weekly subscription: New York — $325 per year; American — $290 per year; Both services — $540 per year.

Chapter 6

In Depth Value Analysis

The Model

The Maverick's valuation model performs two major tasks: it calculates a target price-earnings ratio (P/E) for the market and a target P/E for an individual stock. History suggests that P/E's are related to inflation. In periods of low inflation, P/E's rise. In high inflation periods, P/E's contract. When inflation rises, the rates of return available from fixed income instruments also rise. As fixed income rates become more competitive, some investors switch from stocks to bonds or money market funds. This causes P/E's to contract.

In the Maverick, the projected inflation rate for the next several years is used to derive a target P/E for the market. The Standard & Poor's 400 Industrial Average is used as a proxy for the market.

History suggests that investors' time horizons tend to shrink as inflation rises. This is most noticeable in high growth stocks. When inflation accelerates, investors are unwilling to pay for expected growth beyond the next few years. Inflation creates uncertainty. While uncertainty is the enemy of all stocks, it is particularly damaging to high growth issues, where confidence in the sustainability of an earnings trend is critical. Thus, higher inflation causes the P/E's of high growth issues to contract relative to the market as a whole.

The Maverick captures this phenomenon neatly by its use of an earnings payback period. Once a P/E has been obtained for the S&P 400, the program calculates how long it will take the S&P to earn its P/E given an expected growth rate of earnings. This is called the earnings payback period. As inflation rises, the payback period contracts. If the inflation outlook improves, the payback period lengthens. No value model can be effective unless it allows for the changing time horizons of investors.

The earnings payback period is a critical determinant of individual stock P/E's. The first step in obtaining a stock P/E is to compound and accumulate $1 of earnings over the payback period at the expected earnings growth rate. For example, assume that the payback period is 5 years and that XYZ is expected to grow at 20%. The first year, the earnings would be $1.20, then $1.44, $1.73, $2.07 and finally $2.49. Adding together the earnings for each year yields a Basic P/E of 8.93 for XYZ.

The importance of the payback period is illustrated by the following table. A 5 year payback is consistent with a 9% inflation rate, whereas an 8 year payback corresponds to a 5% inflation rate.

Projected Growth Rate	Payback Period 5 Yrs.	8 Yrs.
10%	6.7 P/E	12.6 P/E
20%	8.9	19.8
30%	11.8	31.0
40%	15.3	48.2

When inflation subsides from 9% (5 yr. payback) to 5% (8 yr. payback), all stocks benefit. However, the P/E's of high growth stocks expand more sharply. Whereas the P/E for a 10% growth issue rises 88% to 12.6, the P/E of a stock growing at 30% rises 163% to 31.

Most investors understand how inflation impacts the level of stock P/E's in general, but few fully appreciate its effect on high growth stocks. In 1980, inflation was rampant. The P/E's of high growth issues seemed low in comparison with moderate growth issues. Many investors felt that the high growth stocks were cheap. They argued that the high growth stocks were the only ones capable of earning superior rates of return in a high inflation economy. The appeal of this logic led to its own downfall. The Maverick model indicated that many of the high growth stocks were expensive. Subsequently, high growth issues suffered a severe setback.

Once a Basic P/E has been calculated, two adjustments are made. First, the estimated dividend payout is used to obtain an approximation of a stock's dividend yield. If two stocks have the same projected growth rate, the one with the higher yield will command a higher P/E. A premium or discount is applied to the Basic P/E by comparing a stock's yield to the S&P 400. Generally the premium or discount is under 15%.

Second, an adjustment is made for earnings volatility. Studies show that investors value earnings predictability, and are willing to pay for it. A premium for low volatility or discount for high volatility is applied to the P/E. Since the S&P's volatility is defined as 25, the maximum discount or premium is 20%.

A stock's Target P/E is obtained by making the above adjustments to the Basic P/E. As you can see, the payout ratio and volatility have relatively minor roles in determining a stock's P/E. By comparison, the length of the earnings payback period (inflation) and the projected growth rate are much more important.

A Target P/E is multiplied by a stock's estimated normal earnings to obtain a Target Value. The Target Value is then compared with the current price to calculate a stock's upside potential or downside risk. The greater the difference between the current price and the Target Value, the greater the extreme in investor psychology. As mentioned in the section on the price cycle (Chapter 2), it is useful to think of Value in both an absolute and relative sense. The Value indicator is the product of ranking the Manager stocks according to their upside potential.

More detail concerning the Value model can be found in the Appendix. Both investment theory and practical experience indicate that the model is a sound representation of reality. As an investor, it will help you focus on the critical issues and provide a consistent framework for evaluating stocks. From the above discussion, it is clear that the most important inputs are the inflation rate, earnings growth rate and estimated normal earnings in that order. Experience indicates that consensus estimates are sufficient to produce satisfactory results. However, special insights concerning the above inputs will yield large dividends.

Suitable Stocks

Since the level of earnings and the projected growth rate are so critical, the model is not adept at evaluating stocks whose prices primarily reflect asset values. Examples include investment companies and Real Estate Investment Trusts (REIT's). In either case, the value of real estate holdings or other assets determines the stock price rather than the stream of future earnings.

Occasionally, it becomes fashionable to view companies in various industries from an asset perspective. A recent example was the oil and gas industry in 1979-80. At the time, analytical attention focused on the purported value of oil and gas reserves rather than earnings. In many cases, such logic was used as a rationale for paying much higher prices for the shares than those justified by earnings alone. Subsequently, many oil and gas stocks declined by 70% or more.

In our opinion, there are only two reasons for emphasizing assets. The first is if a stock is an obvious asset play, like those mentioned above. The second is when there is a strong probability that management will realize the value of a company's assets. If there is a strong likelihood of merger, liquidation or spinoff, asset values take precedence over the Maverick model's Target Value.

Without the prospect of sale, an asset is worth only what it can produce in income. Emphasis on liquidating values or price-to-book

values is useless unless something happens to realize those values. Investors who are successful in asset rich stocks have either the means to force management to take action or the patience to wait until others force action.

Valuation Report

The Maverick's valuation report summarizes the pertinent information about the stocks in a portfolio. The report below is an excerpt from a February, 1983 value analysis of the food industry.

Stock	Earnings Growth Rate	Estimated Normal Earnings	Current P/E	Target P/E	Current Price	Target Value	% Change to Target Value
S&P 400	7.40	18.00	9.35	10.08	168.35	181.44	7.77
GF	11.00	6.30	6.19	11.42	39.00	72.00	84.40
BRY	10.00	3.35	7.16	12.56	24.00	42.00	75.30
PSY	12.00	6.55	7.29	12.73	47.75	83.00	74.60
OAT	11.00	6.45	6.74	8.90	43.50	57.00	32.00
SJM	15.00	3.48	11.31	11.64	39.31	40.50	2.90

In February, General Foods, Beatrice Foods and Pillsbury were the top stocks in the food industry ranked in terms of upside potential. Quaker Oats and Smucker were the two lowest ranked stocks. As you can see (% Change to Target Value), each of the top stocks had at least 74% upside. The change is the percentage difference between the current price and Target Value. Note that the report also includes the Target P/E and estimated normal earnings for each stock. The Target P/E multiplied by the earnings equals the Target Value. For example, General Foods' Target Value is obtained by multiplying 11.42 by 6.30. The current P/E is the result of dividing the current price by the estimated normal earnings. Note that this P/E is different from those found in your newspaper. The financial pages report a P/E based on the latest 12 months earnings. The Maverick's current P/E is based on estimated earnings.

Value Analysis

A preliminary analysis of the food report led to a conclusion that the food industry was cheap in February, 1983. While only five food stocks were highlighted in the above exhibit, the top ten food stocks each had an upside potential of at least 52%. In fact, Smucker was the only food issue with less than 32% upside. This compared to an average upside of 17.6% for the 950 stocks in the Manager.

When virtually an entire industry appears cheap, it is worth investigating. Normally, there is a reason why an industry is neglected. In the case of the food stocks, it seemed that investors were concentrating on stocks with higher prospective earnings gains. The consensus was that the earnings of other industries would expand faster in a robust economic recovery. Since stock prices respond to relative earnings gains, food stocks were unappealing.

Breakeven Analysis

Stock	Price	% Earnings Paid Out	Earnings Volatility	Estimated Earnings Growth Rate	Estimated Normal Earnings	Required to Support Current Price Growth Rate or	Earnings
BRY	24.00	43.00	9.45	10.00	3.35	0.00	1.91
GF	39.00	44.00	24.80	11.00	6.30	0.00	3.42
OAT	43.50	30.00	39.67	11.00	6.45	5.00	4.89
PSY	47.75	32.00	10.34	12.00	6.55	0.00	3.75
SJM	78.63	25.00	29.74	15.00	6.95	14.00	6.75

Once you have identified a stock that appears to be cheap or expensive, the Sensitivity program can be used for further analysis. Just how cheap (or expensive) is the stock? What does the current price imply in terms of the key estimates? What would have to happen in order to make a stock unattractive (or atfractive)? How confident are you that a particular stock represents an opportunity?

Since no one can be certain of his/her estimates, it is necessary to be able to test alternative assumptions. The Breakeven Analysis report indicates what is implied by the current price in terms of the two most important inputs: the growth rate and estimated normal earnings. The first five columns of the Breakeven report are the current inputs for each stock. You may find this useful for keeping a printed record of the inputs.

When you study the Breakeven report, focus on the two columns titled "Required to Support Current Price." The growth rate column indicates what growth rate will produce a Target Value equal to the current price if the other inputs are held constant. For example, the estimated growth rate for Quaker Oats is 11%. What would happen if Quaker were to grow at only 5%? The Breakeven report tells you that the new Target Value would be $43.50, which was Quaker's stock price. Note that all the other inputs are unchanged. By varying the growth rate between 11% and 5%, the Target Value declines from $57 to $43.50 (see Valuation exhibit). In Smucker's case, a growth rate of 14% will produce a Target Value approximately equal to Smucker's price of

$78.63. Smucker's projected growth rate was 15%. Either the estimated earnings of $6.95 and the other inputs were incorrect, or Smucker was fairly priced at $79.

You can see that the Breakeven growth rates for Beatrice, General Foods and Pillsbury are zero (0). How can this be? A zero Breakeven growth rate implies that a stock's current P/E is less than the earnings payback period. Recall that the model computes a P/E by compounding and accumulating $1 of earnings over the earnings payback period. Thus, a zero growth company will have a P/E equal to the length of the payback period. This may seem like an artificial floor, but few stocks trade below the payback for long. In February, the payback period was 7.3 years.

The concept behind the earnings column (far right) of the Breakeven report is similar. What level of earnings will produce a Target Value equal to the current price if the other inputs are held constant? In this case, the calculation is straightforward. Since the Target Value is the product of the Target P/E times the estimated earnings, simply divide the current price by the Target P/E to get the Breakeven earnings. Take Beatrice: $24 divided by 12.56 equals $1.91.

What-If Analysis

While the Breakeven report gives you a quick picture of what is implied by a stock's current price, What-If analysis permits you to test alternative assumptions. For example, the zero Breakeven growth rates for Beatrice, General Foods and Pillsbury tell you that there is a large margin of safety. Even if analysts were optimistic about future growth potential, the stocks appeared cheap. But, how cheap?

Recall that Quaker Oats had a Breakeven growth rate of 5%. How attractive would the three top companies be with a similar growth expectation? The What-If feature allows you to change an input and see the impact on the Target P/E, Target Value and upside potential of a stock. For example, Beatrice's Target Value was $34 assuming a 5% growth rate. Comparable numbers for General Foods and Pillsbury were $56 and $63, respectively. Each of the stocks still had significant upside potential, even at a 5% growth rate.

From this analysis, it seemed clear that the food group had a great deal of investment attraction. In fact the top stocks appeared to be attractive under any reasonable set of assumptions. For example, if the previous year's reported earnings were used instead of estimated earnings, the stocks were still quite cheap at a 7% growth rate or greater.

Of course, you might think, the earnings may decline. Perhaps the market knows that there is trouble ahead. That's why the stocks appear so cheap. This is always a possibility, particularly with an individual issue that appears attractive. But, the chances are lower that an entire industry will surprise Wall Street. It is also less likely in a mature, stable industry like the food group.

Industry analysis will almost invariably produce better results than individual company analysis. When a whole industry becomes cheap, the bad news, if any, is well known. In fact, the more publicized an industry's problems the better. If the consensus is that an industry is without merit, the investment opportunity is significant.

Aftermath (9/23/83)

As a result of the above analysis and neutral-strong Timeliness ratings, several food stocks were added to our recommended list. Since February, General Foods, Beatrice and Pillsbury have risen an average of 32.5% versus a 12% gain for the Dow Jones Industrials. Smucker, the lone fully priced food stock as of February, has declined 1.4%. In spite of its superior performance, the food group still appears quite attractive, with an average upside potential of 69%.

Bibliography

Over the years, investment valuation theory has centered on the notion that the value of an investment is equal to the discounted sum of future cash payments. While the Maverick model uses this idea for the market (S&P 400), it is not appropriate for individual stocks. Many references to the basic valuation concept exist in literature. The earliest is:

John B. Williams, *The Theory of Investment Value* (Cambridge, Mass: Harvard University Press, 1938).

An excellent discussion of the special problems that growth stocks present in valuation is found in:

David Durand, "Growth Stocks and the Petersburg Paradox," *The Journal of Finance,* XII, No. 3 (September, 1957), pp. 348-63.

Some of the basic concepts in the Maverick, particularly earnings volatility, are found in:

Volkert S. Whitbeck and Manown Kisor, Jr., "A New Tool in Investment Decision-Making," *Financial Analysts Journal,* XIX, No. 3 (May-June, 1963), pp. 55-62.

The Maverick's use of the earnings payback period, which differentiates it from most other models, owes its foundation to:

Charles C. Holt, "The Influence of Growth Duration on Share Prices," *Journal of Finance*, Vol. 17, No. 3 (September, 1962), pp. 465-75.

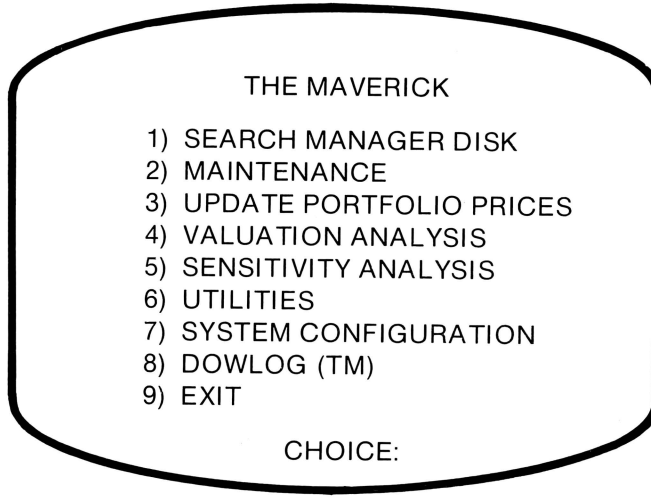
Finally, an interesting discussion of the determinants of P/E's, most particularly a company's accounting policy, can be found in:

William Beaver and Dale Morse, "What Determines Price-Earnings Ratios?," *Financial Analysts Journal*, July/August 1978.

Chapter 7

Task Finder

An aid to quickly locate instructions to execute a specific application.



Task	Program	Program Option	Manual Page
SET-UP SYSTEM CONFIGURATION			
Tailor the Maverick to computer and personal preferences	Sys. Config.		8-1
CREATE A NEW PORTFOLIO			
Personally Selected Stocks from Search Results:	Maintenance	1	11-3
Step 1—Save Tickers	Search	1/3	10-9
Step 2—Build into Portfolio	Utilities	1	15-2
UPDATE PORTFOLIOS FROM A MANAGER			
Value Inputs & Price	Maintenance	4	11-9
Indicators	Search	4	10-12

Task	Program	Program Option	Manual Page
RETRIEVE QUOTES			
Fetch Quotes with Modem	Dowlog	1	16-9
Create Dowlog List	Price	4	12-6
Create Dowlog List	Dowlog	3	16-6
CONVERT FILES			
Adapt Files to 3.0 and Later	Utilities	2	15-3
CHANGES IN AN EXISTING PORTFOLIO			
Add Stocks	Maintenance	1	11-2
Delete Stocks	Maintenance	2	11-7
Change Basic Inputs	Maintenance	3	11-8
Rename	Utilities	4	15-5
Update with a New Manager Issue	Maintenance	4	11-9
Re-Price Stocks:			
Manually	Price	1	12-2
From Quote Diskette	Price	2	12-3
Selectively	Price	3	12-5
Print Quotes	Dowlog	5	16-15
Delete an Entire Portfolio	Utilities	3	15-4
Save Portfolio Changes	Maintenance	6	11-12
INVESTMENT ANALYSIS			
Industry Studies	Search	3	10-11
Breakeven Analysis	Sensitivity	1	14-2
What-If Analysis	Sensitivity	2	14-6
Upside Potential	Valuation	1	13-2
Review a Portfolio	Search	4	10-12
Check a Stock	Search	2	10-10
By Economic Segment (Sector)	Search	1	10-2
SEARCH			
Designate Criteria	Search	1	10-2
Industry Investigation	Search	3	10-11
Check a Stock	Search	2	10-10
Save Results From Which to Build a Portfolio	Search	1/3	10-9
By Economic Segment (Sector)	Search	1	10-2

Task	Program	Program Option	Manual Page

WORKING WITH NON-MANAGER STOCKS

Ballpark Growth & Volatility Estimates	Search	3	10-11
Consensus EPS Estimates	Dowlog	6	16-16
What-If Analysis	Sensitivity	2	14-6

OUTPUT GENERATED

	Displayed	Printed
*Search Results	YES	YES
*Industry Analysis	YES	YES
*Individual Portfolio	YES	YES
Upside Potential	YES	YES
Breakeven Analysis	YES	YES
Graphics	YES	NO
What-If Analysis	YES	NO
Quotes Retrieved	YES	YES

*Design report to contain information meeting personal investment objectives.

Introduction to the Computer Section

Before using the Maverick, make a backup copy of the program diskette. Put the original in a safe place and use the backup diskette as your working copy.

The computer section provides specific instructions for operating the Maverick. Investment discussions are contained in the "Investment Section." To get the most from the Maverick, we suggest that you read the "Investment Section," particularly Chapters 2, 4 and 6, before using the program.

The computer section of this manual is organized as follows:

Task Finder (Chapter 7)	- helps you quickly locate where to perform a specific task.
System Configuration (Chapter 8)	- Set up the program parameters tailored to your computer system and preferences.
Getting Familiar (Chapter 9)	- Guides you through the major program features in a tutorial format.
Chapters 10 through 15	- Instructions relating to each of the Maverick's program modules. The chapters are organized in order of appearance on the Master Menu.

The format of each chapter is:

DISKETTES REQUIRED:	which diskettes are used by a particular module
PURPOSE:	the objective of a routine
PROCEDURE:	how to execute
REMARKS:	notable limitations or guidelines

Conventions

This manual assumes that you know the following conventions:

1) Green Sections:	The actual menus, prompts and tables as they will appear on the screen. The discussion which follows covers your responses and implications.

2)	Ticker Symbols:	Tickers MUST be entered in upper case form. Since the Maverick is ticker symbol oriented, refer to the enclosed issue of Symbol Quik to match a company to a symbol or vice versa.
3)	PRESS:	A single key stroke response is required. The return key does NOT have to be struck.
4)	ENTER:	Type your response. Then, press the RETURN key to indicate that your response is completed.
5)	Boot Program Diskette:	Since the Maverick contains a high speed operating system, the program diskette should be booted. DO NOT "run" the program from DOS 3.3 and Basic. The program will not function if you do the latter.
6)	3.0 Format:	All portfolios used with the Maverick are formatted differently from previous versions. Users with previous releases should convert all files to the new format (See Chapter 15 - Option 2).
7)	Reserve Diskettes:	Reserve an initialized diskette for use at all times. Failure to practice this habit can result in significant time losses.
8)	Errors:	If an error occurs within the Maverick, refer to Appendix B. Common error situations are covered with suggestions for remedy.

Chapter 16 contains the instruction manual for Dowlog™. Dowlog™ was not written nor is it supported by Financial Software, Inc. Its sole purpose is to provide Maverick owners with an automatic quote retrieval capability.

Hard Disk Drive Users

The Maverick program uses three separate diskettes: Program, Manager and Portfolio. The standard floppy system will have the program diskette in Drive 1 and will prompt the user to swap the Portfolio and Manager diskettes in Drive 2 as appropriate.

As an owner of a Hard Disk Drive, you can disable these messages by responding 'Y' to the Hard Disk Drive question in the System Configuration. The Maverick also permits you to specify a volume for the program and another volume for data (i.e. Manager and Portfolios). The combined space requirement of the Manager and Portfolios is such that you may wish to create an extended volume for your data.

Dowlog™ was not written for a hard disk system. It assumes that the program is in Drive 1 and that quotes are stored in Drive 2. Most hard disk manufacturers allow you to superficially assign Drive 1 & 2 to certain volumes. Whether you choose this option or use Dowlog™ in your floppy disk is a matter of preference. In either event, a quote file must be transferred to the Maverick data volume (Manager and Portfolios) in order to update a portfolio.

Chapter 8

System Configuration

PURPOSE: To match the Maverick program to your individual computer system and personal preferences.

Parameters

PROCEDURE: The first time you use the Maverick program, you MUST answer several questions about your computer system.

1) HARD DISK DRIVE (Y/N)

A hard disk drive is a permanent, sealed storage unit.

ENTER 'Y' if the Maverick will be used with a hard disk drive.

WARNING: A RESPONSE OF 'Y' WILL ELIMINATE MESSAGES INSTRUCTING YOU TO INSERT A PARTICULAR DISKETTE (i.e. MANAGER OR PORTFOLIO) AT THE APPROPRIATE TIME. FOR THIS REASON, IT IS IMPERATIVE THAT YOU ENTER 'N' IF YOU WILL BE USING THE MAVERICK PROGRAM WITH FLOPPY DISK DRIVE(S).

The next two questions (2 and 3) depend on how you responded to 'HARD DISK DRIVE (Y/N)'.

If 'Y':

2) DRIVE & VOLUME FOR PROGRAM

and

3) DRIVE & VOLUME FOR DATA

Defined as:

PROGRAM = Maverick Program Diskette

DATA = Manager and Portfolio(s)

Note: Since the Manager and Portfolio(s) must be combined in one volume, we suggest that you use an "extended" volume (i.e. greater than a normal diskette).

ENTER the disk drive number and disk volume number in which you will store the contents of the appropriate diskettes.

The format for entering this information is:

d,Vn

Where d = disk drive number (1 or 2)
n = volume number (1 - 254)

Example: "1,V23"

A comma must separate the drive # and the "V" for volume.

If 'N':

2) DRIVE FOR PROGRAM (1/2)

ENTER '1,' regardless of whether you have one or two disk drive(s).

3) DRIVE FOR DATA (1/2)

Users with 1 disk drive should ENTER '1.'
With two disk drives, ENTER '2.'

4) PRINTER SLOT # (1-7)

ENTER the number of the slot in which your printer interface card resides (normally 1).

5) STOCK PRICE INPUT MODE

There are two methods for entering stock quotes:

D = Decimal Mode
E = Eighths Mode

In considering which selection is appropriate, the table below indicates how prices must be entered for each mode:

Price	Decimal Mode	Eighths Mode
23	23	230
23 ⅛	23.125	231
23 ¼	23.25	232
23 ⅜	23.375	233
23 ½	23.5	234
23 ⅝	23.625	235
23 ¾	23.75	236
23 ⅞	23.875	237

ENTER 'D' to select decimal mode.

ENTER 'E' to select eighths mode.

6) MANAGER WILL BE USED (Y/N)

ENTER 'Y' if you will be accessing the Manager diskette. The purpose of this is to allow you to disconnect the Manager if you intend to add several stocks not in the Manager data base.

ENTER 'N' if the Manager diskette will not be used.

NOTE: Without the Manager enabled, the Search Program will not operate.

7) 80 COLUMN DISPLAY (Y/N)

This will appear ONLY if you have an Apple //e with an 80 column card.

ENTER 'Y' if you wish to display reports in 80 column format.

ENTER 'N' for 40 column reports.

Making Changes

LINE # TO BE CHANGED (ø = NONE) = >

Parameter

1) If '1' is pressed, you MUST answer all System Configuration questions again. This is because the response to 'Hard Disk Drive' affects other parameters.

2) - 4) PRESS the line number corresponding to the parameter you wish to change. ENTER the new parameter.

5) - 7) Since only two (2) responses are acceptable, simply PRESS the line number corresponding to the parameter you wish to change. The alternative will automatically appear on your screen.

Chapter 9

Getting Familiar

PURPOSE: To familiarize you with some of the Maverick's features.

PROCEDURE:

Set-Up

Step 1: Initialize a blank diskette with DOS 3.3.

Step 2: Establish your System Configuration (see Chapter 8).

The Master Menu will appear.

Conduct Search

Step 1: PRESS '1' (SEARCH MANAGER DISK). Insert your Manager diskette when instructed and PRESS return.

After a message is displayed, the Search Menu will appear on the screen.

Step 2: PRESS '3' (EXAMINE 1 INDUSTRY)

Step 3: ENTER '2' (type 2 and PRESS return) for the Food Products Industry. The search will be executed and a menu will appear indicating how many stocks were found and providing several choices for reporting purposes.

Produce Report

Step 1: For the purpose of the demonstration, PRESS '3' (DISPLAY TABLE).

After retrieving the ticker symbols for the Food Products Industry, a table will appear allowing you to design a report.

Step 2: In this tutorial, we will make 3 selections. Users without an Apple //e and an 80 column card will have only 4 choices.

PRESS 'I.' Price will be included.

PRESS return to move the cursor to the next choice - VALUE.

PRESS 'I' to include Value.

PRESS return to move the cursor to the next choice - TIMLINES.

PRESS 'I' to include Timeliness.

PRESS return seven (7) times. The question "ANY CHANGES (Y/N)?" will appear.

Step 3: PRESS 'N' - No changes are desired. A report will appear showing the Price, Value and Timeliness ratings for the 16 food stocks.

Step 4: PRESS the space bar. At the end of an industry report the industry averages will be indicated. Note that the average price is not calculated because no meaningful conclusions can be gained from it.

Step 5: Now that you are aware of the industry's means, PRESS 'R' to review the individual stocks.

REMARKS: As explained in Chapter 2, the Value and Timeliness indicators complement each other. For a buyer, the ideal combination is to find significant upside potential with strong momentum (see Chapter 4 for definitions).

In general, if you were to add the Value and Timeliness ratings together, the most attractive purchase candidates would have combined scores of 5 or less. The best short sale candidates would have a score of 16 or more.

Create Portfolio

Step 1: Press 'X' (EXIT). PRESS '5' (RETURN TO SEARCH MENU). PRESS 'Y' to the question 'SAVE SEARCH RESULTS (Y/N)?'

Step 2: PRESS '3' to save the results of the search for the Food Products Industry. This is the first step in creating a portfolio for in-depth value analysis. When the program requests a

Portfolio diskette, insert your initialized blank diskette (from Set-Up, Step 1).

Once the results from the search have been saved, the Search Menu will appear.

Step 3: PRESS '5' (RETURN TO MASTER MENU). PRESS '6' (UTILITIES) The Utilities Menu will appear.

Step 4: To create a portfolio of the Food Products stocks, PRESS '1.' Then, PRESS '2' (BUILD PORTFOLIO FILES). The program will retrieve the Industry from your Portfolio diskette and instruct you when to insert your Manager diskette.

Once the portfolio inputs have been collected, you will be instructed to reinsert your Portfolio diskette so that the portfolio can be stored.

Step 5: PRESS '3.' Then, PRESS '6' (RETURN TO MASTER MENU).

Valuation Analysis

Step 1: PRESS '4' from the Master Menu. The Valuation Program will be loaded.

Step 2: PRESS '1' (VALUATION REPORT). PRESS return to analyze the entire portfolio.

Step 3: From the Output Menu, PRESS '3' to display the Valuation Report.

REMARKS: The Valuation Report ranks the Food Products stocks in terms of upside potential. When a stock has 25% or more upside, there is a strong possibility that investors are underestimating its prospects. This probability increases as the percentage upside increases. See Chapter 6 for further discussion of the Food Products Industry.

Step 4: PRESS return. In response to the question "REVIEW DATA (Y/N)," PRESS 'N.' Then, PRESS '5' from the Output Menu.

Sensitivity Analysis

Step 1: PRESS '3' from the Valuation Menu to access the Sensitivity Program.

Breakeven Report

Step 2: PRESS '1' from the Sensitivity Menu to produce the Breakeven Report. PRESS return to analyze the entire portfolio.

Step 3: From the Output Menu, PRESS '1' to display the report.

REMARKS: The purpose of the Breakeven Report is to provide quick summary information of how sensitive a stock's target value is to changes in the key inputs (growth rate and EPS estimate).

A reading of Chapter 6 (Breakeven Analysis) is absolutely necessary for proper interpretation of the report. Note that the Valuation and Breakeven analysis discussion in Chapter 6 focuses on the Food Products Industry.

In understanding in-depth value analysis, it may be helpful to read the discussion while the report appears on your screen.

Step 4: PRESS return. In response to the question "REVIEW DATA (Y/N)," PRESS 'N.' Then, PRESS '4' from the Output Menu.

What-If Analysis

Step 5: PRESS '2' from the Sensitivity Menu to perform What-If analysis. ENTER 'PSY' (ticker symbol for Pillsbury).

REMARKS: Note that Pillsbury has declared a 2-for-1 stock split. Thus, the estimated earnings and price have been adjusted relative to the February, 1983 reports in Chapter 6. What-If analysis enables you to test alternatives. For example, look at the Breakeven Growth Rate (BREAKEVEN GR) on your screen.

PRESS 'G.' Then, ENTER the Breakeven GR figure.

Note that the new growth rate now appears in the second line from the top of your screen.

PRESS 'W' to calculate the effect of using the new growth rate. The Target Value should closely approximate the current price. Further, the Breakeven EPS should closely approximate the estimated EPS.

The greater the difference between the Breakeven Growth Rate and the estimated growth rate, the more attractive is a stock from a value perspective.

Step 6: PRESS 'X.' Then, PRESS return to return to obtain the Sensitivity Menu. PRESS '5' to return to the Master Menu.

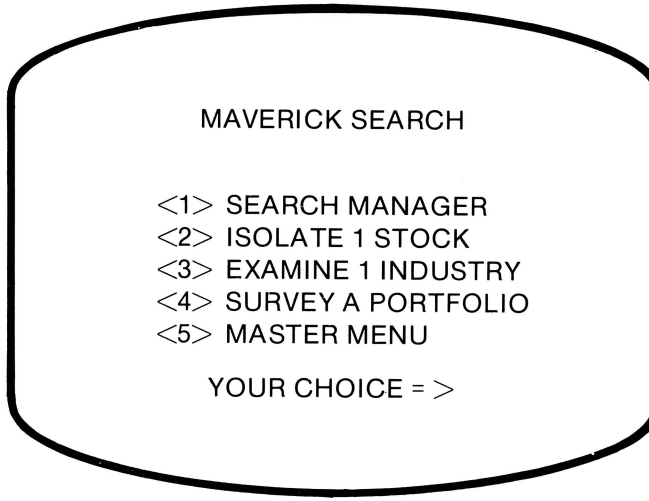
Closing Comments

This concludes the formal tutorial. Please refer to the manual for a better understanding and specific instructions concerning the Maverick's capabilities.

Chapter 10

Search Manager Disk

DISKETTES REQUIRED: Program Portfolio Manager



NOTE:

1. To gain entry to the Search Program, you must insert a Manager diskette in the data drive. If the program fails to find a Manager, it will return to the Master Menu.

2. The first time you use the Manager diskette, the following message will momentarily appear:

   The data contained in the Manager is taken from statistical services, reports in our possession and other sources. While the data herein was gathered from responsible sources, Financial Software, Inc. cannot guarantee its accuracy or completeness.

MENU OPTION 1 - SEARCH MANAGER

PURPOSE: To isolate the stocks in the Manager which have a certain set of characteristics.

PROCEDURE I—PREPARING FOR A SEARCH

```
SEARCH PARAMETERS
PRESS RETURN FOR MENU
1 =VALUE                9 =OPTION
2 =TIMLINES             10 =RECOMEND
3 =EPS GROW
4 =VOL'TY
5 =QUALITY
6 =OWNERSHP
7 =SECTOR
8 =INDUSTRY

PARA TO BE CHANGED (Ø=SRCH) =
```

There are three (3) acceptable responses to:

```
PARA TO BE CHANGED (Ø=SRCH) =
```

(1) PRESS return key = Search Menu

(2) ENTER 'Ø' = Commence Search

(3) Select a Parameter

ENTER the number corresponding to the parameter you wish to search. Follow the instructions below for that parameter. (see also the General Remarks for comments that apply to ALL parameters)

Parameters

1-VALUE

```
SELECTION FOR VALUE:
```

Range: 1 - 10
The Manager stocks are ranked in terms of upside potential. The top 10% is assigned a rank of 1, the second 10% a rank of 2... and the bottom 10% a rank of 10.

Search for the bottom 10% by entering '10'. If you wish to isolate the top 30%, ENTER '1-3'.

2-TIMELINESS

SELECTION FOR TIMLINES :

Range: 1 - 6

Scale is as follows:

STRONG	NEUTRAL	WEAK
1 Established Uptrend	3 Early Uptrend	5 Confirmed Downtrend
2 Confirmed Uptrend	4 Early Downtrend	6 Established Downtrend

Search for stocks in an established uptrend by entering '1'.

To search for all stocks in uptrends, ENTER '1-3'.

3-EPS GROWTH RATE

SELECTION FOR EPS GROW:

Range: 1 - 60

Search for stocks expected to grow at 20% or more by entering '20-60'.

4-VOLATILITY

SELECTION FOR VOL'TY:

Range: 1 - 45

Stocks with stable earnings are found by entering '1-15'. High volatility stocks are isolated by entering '35-45'.

5-QUALITY

SELECTION FOR QUALITY:

Range: 1 - 7

To identify stocks with above average Quality, ENTER '1-3'. Below average Quality is found by entering '5-7'.

6-INSTITUTIONAL OWNERSHIP

SELECTION FOR OWNERSHIP:

Range: 1 - 9

Scale is as follows:

1	less than 10%	6	40 - 50%
2	10 - 15%	7	50 - 60%
3	15 - 25%	8	60 - 70%
4	25 - 35%	9	70% or more
5	35 - 40%		

Find stocks with ownership of 10-25% by entering '2-3'. The heaviest ownership can be found by entering '9'.

7-SECTOR

SECTOR CHOICE #____(RETURN TO END):

Range: 1 - 11

1	Consumer Staples	7	Industrial Manufacturing
2	Consumer Cyclical	8	Services
3	Health Care	9	Financial
4	Technology	10	Transportation
5	Energy	11	Utilities
6	Basic Materials		

Up to two (2) Sectors can be designated in a search. To find Technology, ENTER '4' when prompted for Choice #1, then PRESS return.

To find Basic Materials and Industrial Manufacturing stocks, ENTER '6' when prompted for Choice #1 and '7' for Choice #2.

When you have made an Industry designation, a Sector cannot be selected.

8-INDUSTRY

INDUSTRY CHOICE # ___ (RETURN TO END):

Range: 1 - 157

A separate listing of Industry Groups is provided.

Up to five (5) Industries can be designated. To find Food Products stocks, ENTER '2' and PRESS return.

To search more than one (1) Industry, ENTER your selections one by one as prompted.

An Industry cannot be selected if a Sector is designated.

9-OPTION

SELECTION FOR OPTION:

Range: Ø or 1

To isolate the stocks with listed options, ENTER '1.'

10-RECOMMEND

SELECTION FOR RECOMEND:

Range: Ø or 1

ENTER '1' to find the stocks which are the top recommendations of several brokerage firms.

GENERAL REMARKS:

A zero (Ø) next to a parameter indicates that the parameter will not be searched. To eliminate a parameter from a search, ENTER 'Ø' in response to the first selection/choice for that parameter OR simply PRESS return.

PROCEDURE II —EXECUTE A SEARCH

ENTER 'Ø' to: PARA TO BE CHANGED (Ø=SRCH) =

You will be advised as each parameter is being searched.

PROCEDURE III- DISPLAY OPTIONS

STOCKS FOUND

1) DISPLAY TICKERS ONLY
2) PRINT TICKERS ONLY
3) DISPLAY TABLE
4) PRINT TABLE
5) RETURN TO SEARCH MENU

YOUR CHOICE — >

REMARKS: All reports will contain a list of stocks in alphabetical order of the ticker symbols for the stocks found in the search.

Each report contains the date of the Manager and indicates the basis of the search.

Options 1 and 3

SCREEN DISPLAYS

At the bottom of your screen, you will be given three (3) choices:

Command	Implication
X = Exit	Return to Display Options
R = Reverse	Review preceding page
Space Bar = Continue	Advance to next page

Options 2 and 4

PRINTED REPORTS

You will be instructed to turn on your printer. PRESS return to generate a report. PRESS 'X' to return to the Display Options Menu

WARNING: IF YOU PRESS RETURN WITHOUT TURNING ON YOUR PRINTER, THE PROGRAM WILL CEASE TO FUNCTION. PRESS THE RESET KEY. (See Appendix B - Error Handling)

TABLES

The Maverick allows you to design your own reports. A parameter can be displayed/printed even if it is not specified in a search. Where only one (1) possibility is designated for a particular parameter, it cannot be included in your table. (see Industry in example below)

PARAMETERS TO BE DISPLAYED

SELECTIONS REMAINING ____

Ø	PRICE	Ø
1	VALUE	Ø
2	TIMLINES	Ø
3	EPS GROW	Ø
4	VOL'TY	Ø
5	QUALITY	Ø
6	OWNERSHP	Ø
7	SECTOR	Ø
8	INDUSTRY	ONLY ONE POSSIBILITY
9	OPTION	Ø
10	RECOMEND	Ø

1=DISPLAY Ø=NOT DISPLAY
RETURN=DOWN SPACE=UP

Command	Implication
1	Include in a report
Ø	Omit from a report
Return	Move cursor down
Space	Move cursor up

MAKING SELECTIONS

When the Table for the parameters to be displayed/printed first appears, the cursor will be opposite price. Each parameter entry will be zero (Ø), indicating that it will be excluded from the report.

Move the cursor in the desired direction (RETURN to move UP/SPACE BAR to move DOWN). When the cursor is opposite the parameter you wish to include in a report, PRESS '1'. Note that the "SELECTIONS REMAINING" is decreased by one (1).

If you have specified all the parameters you wish included and one (1) or more selections remain, PRESS return as many times as required to be asked: 'ANY CHANGES (Y/N)?'. If, however, you have exhausted the 'SELECTIONS REMAINING,' you will asked:

ANY CHANGES (Y/N)?

PRESS 'N' to display/print a report.

PRESS 'Y' to make changes.

If there are zero (Ø) selections remaining, you must eliminate one of the parameters to be displayed/printed before selecting a new parameter.

Option 5

RETURN TO SEARCH MENU

To return to the Search menu, PRESS '5.'

If you have just surveyed a portfolio, you will return directly to the Search menu.

If you have just conducted a search and the total number of candidates found exceeds the maximum number of stocks allowed in a portfolio, you will be so advised and then returned to the Search menu.

Otherwise, you will be asked:

SAVE SEARCH RESULTS (Y/N)?

This provides the ability to create a portfolio of the stocks found in a search for in-depth value analysis.

If you do not wish to save the results, PRESS 'N.'

PRESS 'Y' to save the results. The following will appear on your screen:

ACTIVE PORTFOLIO = #

(1) CHANGE PORTFOLIO #
(2) CATALOG PORTFOLIO DISK
(3) SAVE SEARCH RESULTS
(4) BACK TO MENU

YOUR CHOICE = >

1-CHANGE PORTFOLIO

PRESS '1' to change the currently active portfolio.

ENTER the number of the new portfolio with which you wish to work. The acceptable range is 1-255. After entering a new number, verify that it is correct.

2-CATALOG PORTFOLIO DISK

PRESS '2' to see which portfolios are stored on a portfolio diskette. This is helpful if you have several porfolios and cannot recall their numbers.

3-SAVE SEARCH RESULTS

PRESS '3' to save the search results.

The ticker symbols of the candidates found from your search will be saved. On completion, you will automatically be returned to the Search menu.

4-BACK TO MENU

Returns you to the Maverick Search Menu.

MENU OPTION 2 - ISOLATE 1 STOCK

PURPOSE: To examine the price and parameters for a stock as of the date of a particular Manager.

PROCEDURE:

PRESS RETURN TO EXIT

ENTER STOCK TICKER SYMBOL

ENTER the ticker symbol for the stock you wish to inspect.

After viewing a stock, PRESS any key to isolate another stock.

MENU OPTION 3 - EXAMINE 1 INDUSTRY

PURPOSE: 1) To analyze an Industry Group. (see Chapter 3 - Industry Group)

2) To assist with inputs when adding a non-Manager stock to a portfolio. (see Chapter 5)

PROCEDURE: INDUSTRY # TO BE EXAMINED — >

ENTER the number which represents the Industry you wish to examine. (refer to the separate listing of Industry Groups provided)

The 'DISPLAY OPTIONS' menu will appear.

A complete discussion of the 'DISPLAY OPTIONS' procedure starts on page 10-6.

MENU OPTION 4 - SURVEY A PORTFOLIO

PURPOSE: To design and generate a report for the Manager stocks in a portfolio.

This feature is extremely valuable for evaluating recommendations and ideas. Create a portfolio in the Maintenance Program containing the recommendations from a particular source. Then, survey the portfolio for the parameters that meet your investment objectives.

PROCEDURE:

ACTIVE PORTFOLIO = #

(1) CHANGE PORTFOLIO #
(2) CATALOG PORTFOLIO DISK
(3) SURVEY PORTFOLIO
(4) BACK TO MENU

YOUR CHOICE = >

1-CHANGE PORTFOLIO

PRESS '1' to change a portfolio #.

ENTER the number of the new portfolio with which you wish to work. The acceptable range is 1-255. After entering a new number, verify that it is correct.

2-CATALOG PORTFOLIO DISK

PRESS '2' to see which portfolios are stored on a portfolio diskette. This is helpful if you have several portfolios and cannot recall their numbers.

3-SURVEY PORTFOLIO

PRESS '3' to survey a portfolio.

The 'DISPLAY OPTIONS' menu will appear.

A complete discussion of the 'DISPLAY OPTIONS' procedure starts on page 10-6.

4-BACK TO MENU

Returns you to the Maverick Search Menu.

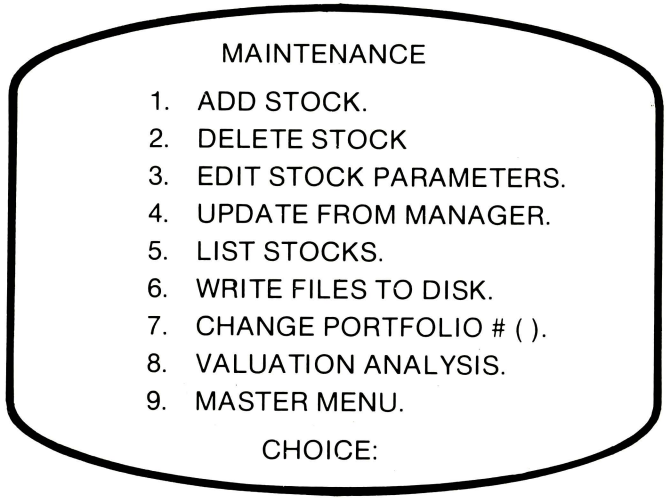
MENU OPTION 5 - MASTER MENU

Return to the Master Menu for accessing other Maverick routines.

Chapter 11

MAINTENANCE

DISKETTES REQUIRED: Program Portfolio Manager



NOTE:

1. An extra initialized DOS 3.3 diskette (also referred to as a "scratch" diskette) should be available in the event that there is not sufficient space on your portfolio diskette.

2. Before making any selection, verify that the correct portfolio # is in the parentheses (option 7).

3. The first time you use the Manager diskette the following message will momentarily appear:

   > The data contained in the Manager is taken from statistical services, reports in our possession and other sources. While the data herein was gathered from responsible sources, Financial Software, Inc. cannot guarantee its accuracy or completeness.

PURPOSE: To create or update a portfolio.

To change a portfolio's basic inputs.

MENU OPTION 1 - ADD STOCK

PURPOSE: (1) Create a new Portfolio

(2) Add stock(s) to an existing portfolio

NOTE: One portfolio can consist of a maximum of 200 stocks.

PROCEDURE I — CREATE A NEW PORTFOLIO

NO STOCKS IN PORTFOLIO

1) SET-UP S&P 400 PARAMETERS
2) RETURN TO MAINTENANCE MENU

WHICH CHOICE (1/2)?

Step 1: The Standard & Poor's 400 Index is the benchmark for the Value model. Therefore, it must be set up before any stocks can be added.

PRESS '1' to establish a portfolio

PRESS '2' if you DO NOT wish to create a new portfolio.

Step 2:

S&P 400 EDIT

1.	STOCK SYMBOL	S&P 400
2.	INFLATION RATE (%)	##
3.	INFLATION PASS-THROUGH (%)	##
4.	NORMALIZED EPS ($)	#.##
5.	EARNINGS VOLATILITY (%)	##

LINE # TO BE CHANGED (0=NONE)?

REMARKS: The table above indicates the format for the S&P 400 inputs.

WITH MANAGER: The inputs for items 2-5 have been retrieved automatically.

WITHOUT MANAGER: ENTER your estimates for items 2-4 as each is requested by the program.

Step 3: CHANGES

If you wish to change any of the S&P's inputs, first PRESS the corresponding line number, then for:

ITEMS 2-4 - ENTER the new estimate

ITEMS 1&5 - Cannot be changed

PRESS '0' when satisfied with the inputs.

Step 4: S&P 400 PRICE

WITH MANAGER:

(MM/DD/YY) PRICE FOR S&P 400 IS: XXX.X

IS THIS PRICE OK (Y/N)?

PRESS 'Y' if satisfactory. Go to Procedure II.

PRESS 'N' if you wish to change the price. Continue with next step (Without Manager).

WITHOUT MANAGER:

ENTER S&P 400 PRICE (Decimal)=

You can obtain a price from the Wall Street Journal, Barron's, or most local newspapers. Note that the S&P price is always entered in decimal mode because it is not quoted in eighths.

The price you have entered will be displayed and you will be asked if it is 'OK'. Once you are satisfied, ENTER the date of the S&P 400 price in response to the prompt. Two digits each are required for Month/Day/Year.

PROCEDURE II — ADDING STOCKS

Step 1:

INPUT STOCK TICKER SYMBOL

PRESS RETURN TO EXIT

ENTER SYMBOL FOR STOCK # #

REMARKS: Only upper case letters are accepted.

If you are using the Manager diskette and a stock is not contained in the Manager, you will have the option to add the stock manually.

PRESS the return key to obtain the Maintenance Menu.

Step 2:

XYZ EDIT

1.	STOCK SYMBOL	XYZ
2.	5 YR EPS GROWTH RATE (%)	##
3.	% EPS PAID OUT IN DIVS (%)	##
4.	NORMALIZED EPS ($)	#.##
5.	EARNINGS VOLATILITY (%)	##

LINE # TO BE CHANGED (0=NONE)?

REMARKS: The table above indicates the format for the basic stock inputs.

MANAGER STOCK: The inputs for items 2-5 have been retrieved.

NON-MANAGER STOCK: ENTER your estimates for items 2-4 as each is requested by the program.

Parameter	Acceptable Range
Growth Rate	1-60
Payout Ratio	0-99
Normal EPS	.01-99

VOLATILITY

Item 5: There are two acceptable methods:

'1' ENTER your volatility estimate directly

Acceptable Range: 0-45

or

'2' have the program calculate a volatility estimate.

If '1' is selected, ENTER your estimate and proceed to Step 3.

If '2' is selected:

NO. OF YEARS (3 TO 10):

In order to calculate the volatility, you need at least 3 years of historical earnings per share. We recommend a minimum history of 5 years.

ENTER earnings per share starting with the earliest year and ending with the most recent year. The program changes zero (Ø) or any negative input to $0.01 per share.

When satisfied with inputs, PRESS 'N' and the program will calculate the earnings volatility and a trendline growth rate.

Step 3: CHANGES

If you wish to change any of the stock's inputs, first PRESS the corresponding line number, then for:

ITEMS 1-4 - ENTER the new ticker symbol or estimate

ITEM 5 - ENTER new volatility estimate (refer to Procedure II, Step 2 — VOLATILITY)

PRESS Ø when satisfied with all inputs.

Step 4: STOCK PRICE

MM/DD/YY PRICE FOR XYZ IS: $##.##

IS THIS PRICE OK (Y/N)?

WITH MANAGER: If the price is satisfactory, PRESS 'Y.' You will then be able to add another stock.

If the Price is not satisfactory, PRESS 'N.' (Continue with 'Without Manager').

WITHOUT MANAGER:

ENTRY MODE: (Decimal or Eighths)

INPUT MM/DD/YY PRICE FOR XYZ

ENTER the correct price. The price you input will be repeated for your verification.

If the price is satisfactory, PRESS 'Y.' You will then be able to add another stock.

If the price is incorrect, PRESS 'N' and enter the correct price.

MENU OPTION 2 - DELETE STOCK

PURPOSE: To remove a stock from a portfolio.

PROCEDURE:

INPUT STOCK TICKER SYMBOL

PRESS RETURN TO EXIT

ENTER STOCK TO BE DELETED:

ENTER the stock ticker symbol that you wish to delete. If you are removing more than one, simply repeat this procedure.

PRESS the return key to obtain the Maintenance Menu.

MENU OPTION 3 - EDIT STOCK PARAMETERS

PURPOSE: To change a stock's basic inputs.

PROCEDURE:

PRESS RETURN TO EXIT

ENTER STOCK TO BE EDITED:

ENTER the ticker symbol for the stock you wish to change.

To change the S&P 400, ENTER 'S&P' as the ticker symbol.

REMARKS: If full instruction is necessary, refer to Chapter 11 (Menu Option 1 - Add Stock). Begin with Procedure II, Step 2.

MENU OPTION 4 - UPDATE FROM MANAGER

PURPOSE: To update inputs and prices from a current Manager issue.

CHANGES DATE, INPUTS & PRICE
FOR MANAGER STOCKS ONLY

MANAGER STOCKS: PRICED A/O MM/DD/YY
YOUR PORTFOLIO: PRICED A/O MM/DD/YY

1) FULLY AUTOMATIC UPDATE
2) DISPLAY EACH STOCK'S DATA
3) BACK TO MENU

SELECT CHOICE - >

The Portfolio Update is a quick and simple way to keep your portfolios current.

Both menu options 1 and 2 update the stocks in your portfolio which are also in the Manager.

Thus, non-Manager stock inputs and prices will not be affected.

> Implication: If there are non-Manager stocks in your portfolio, the date of their prices may differ from the price date for Manager stocks.

To make price adjustments, refer to Option 3 of the Master Menu (Update Portfolio Prices).

PROCEDURE I — WITH MANAGER

FULLY AUTOMATIC UPDATE

Only the ticker symbol for the stock being updated is displayed.

You will be advised when the update is completed.

A list of the stocks not updated will appear on your screen. To update these stocks, refer to option 3 of the Maintenance Menu (Edit Stock Parameters).

DISPLAY EACH STOCK'S DATA

Option 2 displays a table of the new basic inputs for each stock. The new price is not indicated.

If you wish to change any of the stock's inputs, first PRESS the corresponding line number, then for:

ITEMS 1-4 - ENTER the new ticker symbol or estimate

ITEM 5 - There are two acceptable methods:

1) ENTER the number you feel is representative of the stock's earnings volatility

or

2) have the program calculate a volatility. (See Chapter 11, Menu Option 1 - Add Stock; beginning with Procedure II, Step 2)

Stocks NOT included in Manager:

XYZ IS NOT AVAILABLE
ON MANAGER DISK
(1) TO UPDATE STOCK MANUALLY
(2) GO TO NEXT STOCK
WHICH CHOICE - >

If '1' is selected, you will be given the opportunity to manually change the stock's basic inputs.

If you do not wish to make any changes, select '2.'

PROCEDURE II — WITHOUT MANAGER

The portfolio update feature can be used without access to the Manager. It allows you to examine each stock in a portfolio without entering a ticker symbol each time.

MENU OPTION 5 - LIST STOCKS

PURPOSE: Review the stocks and inputs in a portfolio.

PROCEDURE:

PRESS RETURN FOR 1ST STOCK

STARTING WITH STOCK — >

If you wish to begin your listing with the first stock, PRESS return.

To start the report at any other point, ENTER the ticker symbol. The report will start with that stock and continue alphabetically.

Sample Display

STOCK	GROWTH RATE	PAYOUT RATIO	NORMAL EPS	EPS VOLTY

REMARKS: The display is in alphabetical order by ticker symbol. If you wish to exit the listing, PRESS 'X' in response to the prompt at the bottom of your screen. This returns you to the Maintenance Menu. To display subsequent pages, PRESS any key other than 'X.' After reviewing the last page, PRESS any key to return to the Maintenance Menu.

MENU OPTION 6 - WRITE FILES TO DISK

PURPOSE: To make a permanent record of your portfolio.

PROCEDURE: If no changes have been made in a portfolio, you will be so advised.

After a portfolio's information has been saved, you will have an opportunity to make a backup copy. Insert a second portfolio diskette.

MENU OPTION 7 - CHANGE PORTFOLIO # ( )

PURPOSE: To change the currently active portfolio.

PROCEDURE:

ACTIVE PORTFOLIO = #

1) CHANGE PORTFOLIO
2) CATALOG PORTFOLIO DISK
3) RETURN TO MENU

WHICH CHOICE = >

1 - CHANGE PORTFOLIO

To change the portfolio #, PRESS '1.'

If you have made any changes in the portfolio with which you were working, you will be given the opportunity to save the changes on disk before changing to a new portfolio. NOTE: if the changes are not saved, they will be lost.

ENTER the # of the new portfolio with which you wish to work. The acceptable range is 1-255. After entering a new number, verify that it is correct and PRESS '3' to return to the Maintenance Menu.

2 - CATALOG PORTFOLIO DISK

PRESS '2' to see which portfolios are stored on a portfolio diskette. This is helpful if you have several portfolios and cannot recall their numbers.

3 - RETURN TO MENU

Returns you to the Maintenance Menu.

MENU OPTION 8 - VALUATION ANALYSIS

This permits you to bypass the Master Menu and go to the Valuation Program directly. In the Valuation Program, you will be able to calculate the target value and upside potential for a stock or portfolio of stocks. As long as you don't change the portfolio #, you can move back and forth between the Maintenance and Valuation Programs without rereading a portfolio's information.

See Chapter 13 for details on Valuation Analysis.

MENU OPTION 9 - MASTER MENU

Return to the Master Menu for accessing other Maverick routines.

Chapter 12

UPDATE PORTFOLIO PRICES

DISKETTES REQUIRED: Program Portfolio Quote

MENU OPTION 1 - MANUAL PRICE UPDATE

PURPOSE: To price an entire portfolio by keying in prices from a newspaper.

PROCEDURE:

STOCK PRICE UPDATE

DATE OF UPDATE (e.g. 01/06/80):

ENTER the date corresponding to the prices you will be entering. Two (2) digits each for MM/DD/YY.

PRICE UPDATE TABLE

One by one, you will be asked to provide a price for the S&P 400 and each stock in a portfolio. The appropriate format for price entries will flash at the top of the screen. Note that the S&P 400 is always entered in decimal mode.

As you make entries, a table of prices will be created. There will be thirteen (13) entries per page.

At the bottom of a page, you will be given three (3) choices:

(1) X=EXIT

ENTER 'X' to discontinue the update. The prices for your portfolio will be stored on a portfolio diskette. If you ENTER 'X' before an entire portfolio is updated, you will have a mixture of old and new prices in a portfolio. The new date will replace the old date.

(2) RETURN=NEXT

PRESS return to continue to the next page.

On the last page, 'RETURN' causes the prices to be saved.

(3) STOCK #

ENTER the number corresponding to the stock's price you wish to change.

NEW XYZ PRICE == >

ENTER new price. The change will appear in the table.

MENU OPTION 2 - AUTO PRICE UPDATE

PURPOSE: To update portfolio prices from quotations retrieved by modem.

PROCEDURE:

AUTO PRICE UPDATE

1-DOWLOG (A) QUOTE DISKETTE

2-DOW JONES MARKET ANALYZER (B)
TEMPORARY WORK DISKETTE

3-BACK TO MENU

SELECT OPTION == >

(A) TM OF STOCK MARKET SOFTWARE, INC.
(B) TM OF DOW JONES & CO., INC.

1-DOWLOG

Step 1: PRESS '1' to update prices using a Dowlog Quote Diskette.

Step 2: ENTER DATE (MM/DD)

ENTER the date using two digits each for month and day. For Example, '01/01.'

ENTER FILE NAME

ENTER the Dowlog Stock List Name.

Step 3: # STOCKS NOT FOUND
ENTRY MODE:

XYZ NOT FOUND

1) INPUT NEW PRICE FOR XYZ
2) KEEP PRICE AT XX.XXX
3) EXIT (SAVE PRICES)

YOUR CHOICE = >

1-INPUT NEW PRICE

PRESS '1' to input a new price.

INPUT MM/DD/YY PRICE FOR XYZ - >

ENTER the price. Note that the price entry mode will be flashing. The price will be displayed. You will be asked:

IS THIS PRICE OK (Y/N)?

PRESS 'N' to make a price change.

PRESS 'Y' to advance to the next stock.

If you have updated the last stock that was not found, you will be instructed to insert your portfolio diskette, so that the updated prices can be saved.

2-KEEP PRICE

PRESS '2' to retain the price shown. The next stock that was 'NOT FOUND' will appear.

On the last stock, you will be instructed to insert your portfolio diskette, so that the prices can be saved.

3-EXIT (SAVE PRICES)

Option '3' allows you to skip the process of manually updating the prices for stocks not found. This is particularly useful if a large number of stocks were not updated.

A faster way to selectively change stock prices is to use Price Menu Option 3 (Edit Current Prices)

2-DOW JONES MARKET ANALYZER

STEP 1: PRESS '2' to update prices using a Market Analyzer Temporary Work Diskette.

STEP 2: ENTER the year. For example, 1983 is entered as '83'.

STEP 3: Refer to Dowlog - Step 3.

MENU OPTION 3 - EDIT CURRENT PRICES

PURPOSE: To selectively change stock prices. If you wish to update an entire portfolio, use Price Menu option 1 or 2.

PROCEDURE:

PRESS RETURN FOR 1ST STOCK

STARTING STOCK SYMBOL — >

A table of ticker symbols and prices will be displayed. If you wish to start the listing with the first stock in a portfolio, PRESS return.

To start the listing at any other point, ENTER the ticker symbol. The report will begin with that stock and continue alphabetically.

At the bottom of a page, you will be given three (3) choices:

(1) X=EXIT

ENTER 'X' to discontinue and return to the Price Menu.

(2) RETURN=NEXT

PRESS return to advance to the next page.

(3) STOCK #

ENTER the number corresponding to the Stock's price you wish to change.

NEW XYZ PRICE ==>

ENTER the new price. The change will appear in the table.

MENU OPTION 4 - CREATE DOWLOG LIST

PURPOSE: To create a Dowlog Stock List from a Maverick portfolio or portfolios. This enables you to supply ticker symbols to Dowlog without manually entering the tickers.

PROCEDURE:

CREATE DOWLOG LIST

PORTFOLIO #: LIST NAME:
STOCKS: STOCKS:

1-CHANGE # 2-CHANGE NAME
3-CATALOG 4-CATALOG
5-READ PORT 6-READ LIST
6-LIST PORT 8-LIST LIST

9-MERGE PORTFOLIO & LIST
10-SAVE LIST ON DOWLOG DISK
11-BACK TO PRICE MENU

COMMAND - >

CONVERT A PORTFOLIO FOR DOWLOG

Step 1: DESIGNATE & READ PORTFOLIO

Verify that the portfolio number at the top of the screen is correct. If not, ENTER '1.' In response to 'NEW PORTFOLIO #': ENTER your selection.

If there are zero (0) stocks in a portfolio, the ticker symbols must be retrieved from your portfolio diskette before a Dowlog List can be created. To retrieve the tickers, ENTER '5.' The number of stocks contained in the portfolio will appear above the dotted line in the menu.

Step 2: NAME A DOWLOG STOCK LIST

LIMITATIONS

1) Eight (8) characters to a name.

2) Name must start with a letter. Once a letter is struck, you may include numbers.

3) A List can contain up to 500 stocks.

ENTER '2'. In response to 'NEW STOCK LIST NAME:' ENTER the name of your choice.

Step 3: CREATE DOWLOG LIST

Due to differences in format, Dowlog cannot "Read" a Maverick Portfolio. ENTER '9' to reformat a portfolio.

Step 4: SAVING A DOWLOG LIST

ENTER '10.' You will be instructed to insert your Dowlog Program diskette.

REMARKS: To include another portfolio, simply repeat Steps 1 and 3. You can continue to combine portfolios until the total number of stocks in your List reaches 500.

If you are merging a Maverick portfolio with an existing list of stocks stored on a Dowlog Program diskette, the list must be read (Option 6) before the two can be combined.

Options 3 & 4 permit you to examine a portfolio or Dowlog diskette to verify that a portfolio # or List Name is correct.

Option 7 & 8 are provided so that you can see which stocks are in a portfolio or Dowlog List, respectively.

MENU OPTION 5 - RUN DOWLOG PROGRAM

PURPOSE: To access the Dowlog Programs.

PROCEDURE: You will be instructed to insert a Dowlog Program diskette.

An opportunity to avoid running Dowlog is provided.

Refer to the tab entitled "DOWLOG" for specific instructions.

MENU OPTION 6 - CHANGE PORTFOLIO # ( )

PURPOSE: To change the currently active portfolio.

PROCEDURE:

ACTIVE PORTFOLIO = #

1) CHANGE PORTFOLIO
2) CATALOG PORTFOLIO DISK
3) RETURN TO PRICE MENU

WHICH CHOICE = >

1-CHANGE PORTFOLIO

To change the portfolio #, PRESS '1.'

ENTER the number of the new portfolio with which you wish to work. The acceptable range is 1-255. After entering a new number, verify that it is correct and PRESS '3' to return to the Price Menu.

2-CATALOG PORTFOLIO DISK

PRESS '2' to see which portfolios are stored on a portfolio diskette. This is helpful if you have several portfolios and cannot recall their numbers.

3-RETURN TO PRICE MENU

Returns you to the Price Menu.

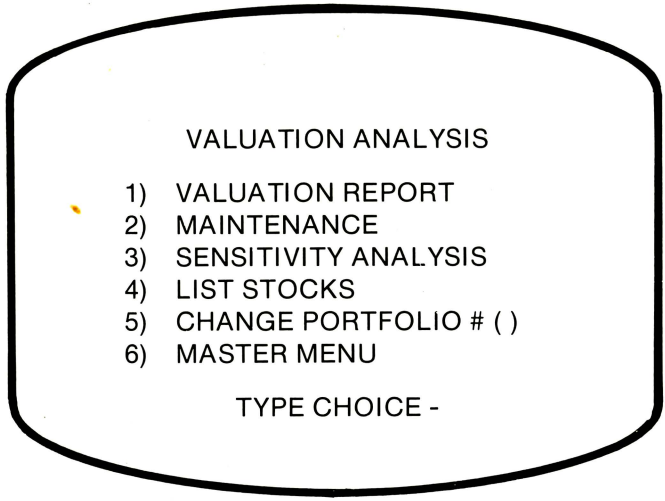
MENU OPTION 7 - MASTER MENU

Return to the Master Menu for accessing other Maverick routines.

Chapter 13

VALUATION ANALYSIS

DISKETTES REQUIRED: Program Portfolio



NOTE:

1. You cannot operate this program unless a portfolio has been created.
2. Before making any selection, verify that the correct portfolio # is in the parentheses (option 5).

MENU OPTION 1 - VALUATION REPORT

PURPOSE: To calculate the target value and upside potential for a stock or portfolio of stocks.

PROCEDURE:

Step 1:

HOW MANY STOCKS DO YOU WISH TO ANALYZE? (1-#)

PRESS RETURN FOR ALL # STOCKS >

The total number of stocks in a given portfolio will appear in the blanks (#). If you wish to analyze only a few stocks, ENTER the number to be selected. Then, ENTER the individual ticker symbols as prompted.

Step 2:

OUTPUT MENU

1-DISPLAY ALPHABETICAL TABLE
2-PRINT ALPHABETICAL TABLE
3-DISPLAY RANKED TABLE
4-PRINT RANKED TABLE
5-BACK TO MENU

YOUR CHOICE — >

Selections 1 or 2 from the OUTPUT MENU will generate a report in alphabetical order by ticker symbol if the entire portfolio is being analyzed. If only a few stocks are chosen, they will be displayed in the order selected. The report will contain the stocks you designated in Step 1.

Selections 3 or 4 will produce a ranking of the stocks in the portfolio according to their upside potential.

Alphabetical reports cannot be generated after a portfolio has been ranked according to upside potential.

Selection 5 will return you to the Valuation Menu.

Sample Screen Display/Printed Report

STOCK	GROWTH RATE	NORMAL EARNS*	CURRENT P/E*	TARGET P/E*	CURRENT PRICE	TARGET VALUE	% CHANGE TO TARGET

* Excluded from a 40 column display

REMARKS:

ITEMS 1 & 3 - DISPLAYS:

First page of Display - At the bottom of your screen, PRESS 'X' to return to the OUTPUT MENU or PRESS any key other than 'X' to display the next page on the screen.

Subsequent Pages - At the bottom of your screen, you will be given choices:

X	:	exit routine and return to menu
SPACE BAR	:	continue to the next page
R	:	review the preceding page

On the last page, you may start at the beginning of your listing by pressing 'Y' in response to the question: 'REVIEW DATA (Y/N).' To return to the OUTPUT MENU, PRESS 'N.'

ITEMS 2 & 4 - PRINT TABLE:

If you select '2' or '4', you will be instructed to turn on your printer. PRESS '1' to generate a report.

PRESS '2' to return to the OUTPUT MENU.

WARNING: IF YOU PRESS '1,' 'PRINT REPORT,' WITHOUT TURNING ON YOUR PRINTER, THE PROGRAM WILL CEASE TO FUNCTION. PRESS THE RESET KEY. (See Appendix B - Error Handling)

See Chapter 6 for interpreting your report(s).

MENU OPTION 2 - MAINTENANCE

This permits you to bypass the Master Menu and go to the Maintenance Program directly. In the Maintenance Program, you can make changes in a portfolio or the inputs for a stock. As long as you don't change the portfolio #, you can move back and forth between the Maintenance and Valuation Programs without rereading a portfolio's information.

See Chapter 11 for details on Maintenance.

MENU OPTION 3 - SENSITIVITY ANALYSIS

This directs you to the Sensitivity Program. There, you will be able to do Breakeven and What-If analysis. When you select Sensitivity Analysis, the current portfolio's information is lost. The Sensitivity Program will retrieve the information from your diskette again.

See Chapter 14 for details on Sensitivity Analysis.

MENU OPTION 4 - LIST STOCKS

PURPOSE: Review the stocks and information in a portfolio.

PROCEDURE:

PRESS RETURN FOR 1ST STOCK

STARTING WITH STOCK — >

If you wish to begin your listing with the first stock, PRESS return.

To start the report at any other point, ENTER the ticker symbol. The report will start with that stock and continue alphabetically.

Sample Display

STOCK	GROWTH RATE	PAYOUT RATIO	NORMAL EPS	EPS VOLTY

REMARKS: The display is in alphabetical order by ticker symbol. If you wish to exit the listing, PRESS 'X' in response to the prompt at the bottom of your screen. This returns you to the Valuation Menu.

To display subsequent pages, PRESS any key other than 'X.'

After reviewing the last page, PRESS any key to return to the Valuation Menu.

MENU OPTION 5 - CHANGE PORTFOLIO # ( )

PURPOSE: To change the currently active portfolio.

PROCEDURE:

ACTIVE PORTFOLIO = #

1) CHANGE PORTFOLIO
2) CATALOG PORTFOLIO DISK
3) RETURN TO MENU

WHICH CHOICE = >

1 - CHANGE PORTFOLIO

To change the portfolio #, PRESS '1'.

ENTER the # of the new portfolio with which you wish to work. The acceptable range is 1-255. After entering a new number, verify that it is correct and PRESS '3' to return to the Valuation Menu.

2 - CATALOG PORTFOLIO DISK

PRESS '2' to see which portfolios are stored on a portfolio diskette. This is helpful if you have several portfolios and cannot recall their numbers.

3 - RETURN TO MENU

Returns you to the Valuation Menu.

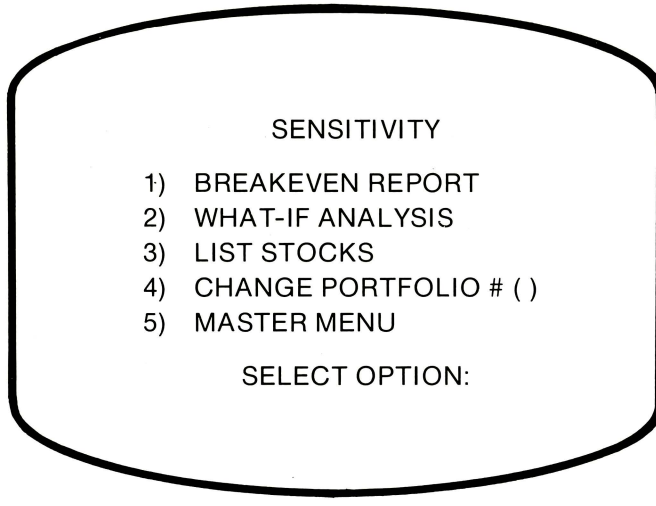
MENU OPTION 6 - MASTER MENU

Return to the Master Menu for accessing other Maverick routines.

Chapter 14

SENSITIVITY ANALYSIS

DISKETTES REQUIRED: Program Portfolio



NOTE:

1. You cannot operate this program unless a portfolio has been created.
2. Before making any selection, verify that the correct portfolio # is in the parentheses (option 4).

MENU OPTION 1 - BREAKEVEN REPORT

PURPOSE: To calculate the earnings growth rate and earnings per share implicit in the current stock price.

PROCEDURE:

HOW MANY STOCKS DO YOU WISH TO ANALYZE? (1 - #)

PRESS RETURN FOR ALL # STOCKS

Step 1: The total # of stocks in a given portfolio will appear in the blanks (#). If you wish to analyze only a few stocks, ENTER the number to be selected. Then, ENTER individual ticker symbol(s) as prompted.

Step 2:

OUTPUT MENU

1-DISPLAY TABLE
2-PRINT TABLE
3-GRAPHICS
4-BACK TO MENU

YOUR CHOICE >

Selections 1 and 2 from the OUTPUT MENU will generate a report in alphabetical order by ticker symbol.

Sample Screen Display/Printed Report

STOCK	PRICE	% EARNS PAID OUT*	EARNS VOLTY*	EST. EARNS GROWTH RATE	EST NORMAL EARNS	REQUIRED TO SUPPORT CURRENT PRICE GROWTH RATE OR EARNS

* Excluded from a 40 column display

1-DISPLAY TABLE

First page of Display - At the bottom of your screen, PRESS 'X' to return to the OUTPUT MENU or PRESS any key other than 'X' to display the next page on the screen.

Subsequent Pages - At the bottom of your screen, you will be given choices:

X	:	exit routine and return to menu
SPACE BAR	:	continue to the next page
R	:	review the preceding page

On the last page, you may start at the beginning of your listing by pressing 'Y' in response to the question: 'REVIEW DATA (Y/N).' To return to the OUTPUT MENU, PRESS 'N.'

2-PRINT TABLE

If you select '2,' you will be instructed to turn on your printer. PRESS '1' to generate a report.

PRESS '2' to return to the OUTPUT MENU.

WARNING: IF YOU PRESS '1,' 'PRINT REPORT,' WITHOUT TURNING ON YOUR PRINTER, THE PROGRAM WILL CEASE TO FUNCTION. PRESS THE RESET KEY.
(See Appendix B - Error Handling)

See Chapter 6 for interpreting your report(s).

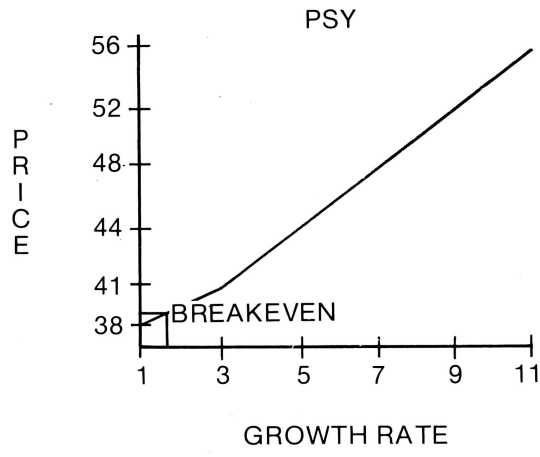
3-GRAPHICS

AVAILABLE PLOTS

1. GROWTH V. PRICE
2. NORMAL EPS V. PRICE
3. RETURN TO OUTPUT MENU

SELECT CHOICE=>

GROWTH VS. PRICE



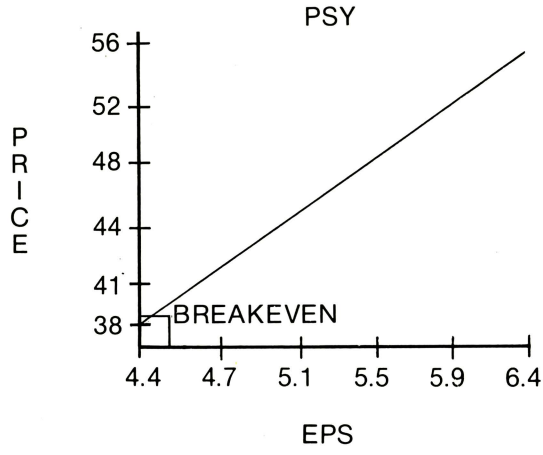
PRESS '1.' ENTER ticker symbol for the stock you wish to plot.

The above example was produced as of 10/31/81, when Pillsbury's (PSY) price was $39 ¾. The graph depicts how PSY's Target Value is affected by a range of growth rate inputs. For example, an 11% Growth Rate assumption yields a Target Value of $56. A 7% Growth Rate yields a Target Value of $48.

As you can see, a 2% Growth Rate produces a Target Value approximately equal to PSY's 10/81 price of $39 ¾.

With a Breakeven Growth Rate of 1% or less, no Breakeven point is plotted on the graph.

NORMAL EPS VS. PRICE



PRESS '2.' ENTER ticker symbol for the stock you wish to plot.

The earnings graph plots how the Target Value is impacted by changing the estimate of normalized earnings. Since the Target P/E has already been established for a stock, the Target Value line in an EPS graph is straight. As in the Growth Rate graph, each earnings point relates to the corresponding point on the price axes. For example, an earnings estimate of $5.50 for PSY produces a Target Value of $48.

When the Breakeven Growth Rate is 1% of less, no Breakeven Point will be plotted.

PRESS 3 to exit Graphics Menu and return to the Output Menu.

4-BACK TO MENU

Returns you to the Sensitivity Menu.

MENU OPTION 2 - WHAT IF ANALYSIS

PURPOSE: To test whether a stock is attractive or unattractive by applying a range of reasonable input estimates. The objective is to increase your confidence in a decision, not to force a stock to be attractive.

PROCEDURE:

Step 1: ENTER a ticker symbol.

You will be informed if the stock is not in the currently active portfolio.

PRESS the return key to obtain the Sensitivity Menu.

PSY

	GROWTH	PAYOUT	EPS	VOLTY
CONSTANTS	12.00	32.00	7.95	10.00
WHAT IF	10.00	32.00	7.95	10.00

INPUTS	CURRENT PRICE	69.88
G=GROWTH		
P=PAYOUT	TARGET P/E	11.80
E=EPS	TARGET VALUE	93.82
V=VOLTY	CHANGE TO TV	34.30
COMPUTE	BREAKEVEN GR	4.00
C=CONSTANTS	BREAKEVEN EPS	5.92
W=WHAT IF		
X=EXIT	COMMAND —>	

Step 2: A table similar to the 10/28/83 Pillsbury (PSY) example above will appear on your screen. Refer to the definitions below when engaging in What-If analysis.

CONSTANTS:

The 'CONSTANTS' line contains the basic inputs stored on a portfolio diskette. For example, PSY's constant Growth Rate is 12%. A stock's constants cannot be changed in What-If analysis.

If you wish to make changes, see Chapter 11 (Maintenance).

COMMANDS

There are seven (7) valid, single-letter commands as indicated below:

INPUTS(4)

Commands	Changes	Acceptable Range
G	Growth Rate	1-60
P	Payout Ratio	0-99
E	EPS	.01-99
V	Volatility	0-45

To change the 'What If' line, PRESS one of the Input commands. For example, to change PSY's Growth Rate from 12% to 10%, PRESS 'G' and ENTER '10'. The 'What If' line will reflect the change.

> NOTE: If unreasonable inputs are entered for What-If analysis, (e.g. $.01 EPS for a company expected to earn $3.00) expect the calculation to take a considerable amount of time. Furthermore, the output will be meaningless.

COMPUTE(2)

Commands	Calculations
C	Constants
W	What-If

To calculate the impact of your new inputs on the Target Value and % Change to Target, PRESS 'W.' In the PSY example, a 10% Growth Rate reduces the Target Value from 102.76 to 93.82.

The 'C' command permits you to recalculate the Target Value and upside potential based on the inputs in the 'CONSTANTS' line.

EXIT(1)

PRESS 'X' to analyze another stock.

MENU OPTION 3 - LIST STOCKS

PURPOSE: Review the stocks and information in a portfolio.

PROCEDURE: PRESS RETURN FOR 1ST STOCK

STARTING WITH STOCK — >

If you wish to begin your listing with the first stock, PRESS return.

To start the report at any other point, ENTER the ticker symbol. The report will start with that stock and continue alphabetically.

Sample Screen Display

STOCK	GROWTH RATE	PAYOUT RATIO	NORMAL EPS	EPS VOLTY

REMARKS: The display is in alphabetical order by ticker symbol. If you wish to exit the listing, PRESS 'X' in response to the prompt at the bottom of your screen. This returns you to the Sensitivity Menu.

To display subsequent pages, PRESS any key other than 'X.'

After reviewing the last page, PRESS any key to return to the Sensitivity Menu.

MENU OPTION 4 - CHANGE PORTFOLIO # ( )

PURPOSE: To change the currently active portfolio.

PROCEDURE:

ACTIVE PORTFOLIO = #

1) CHANGE PORTFOLIO
2) CATALOG PORTFOLIO DISK
3) RETURN TO MENU

YOUR CHOICE = >

1 - CHANGE PORTFOLIO

To change the portfolio #, PRESS '1.'

ENTER the # of the new portfolio with which you wish to work. The acceptable range is 1-255. After entering a new number, verify that it is correct and PRESS '3' to return to the Sensitivity Menu.

2 - CATALOG PORTFOLIO DISK

PRESS '2' to see which portfolios are stored on a portfolio diskette. This is helpful if you have several portfolios and cannot recall their numbers.

3 - RETURN TO MENU

Returns you to the Sensitivity Menu.

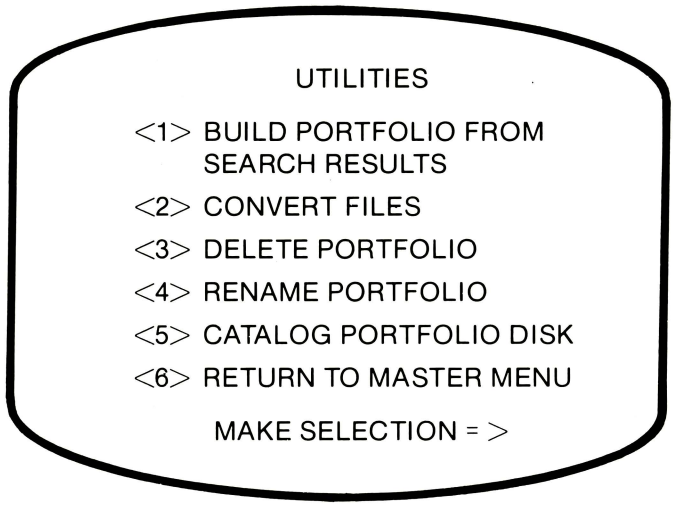
MENU OPTION 5 - MASTER MENU

Return to the Master Menu for accessing other Maverick routines.

Chapter 15

UTILITIES

DISKETTES REQUIRED: Program Portfolio Manager



NOTE: An extra initialized DOS 3.3 diskette (also referred to as a "scratch" diskette) should be available in the event that there is not sufficient space on your portfolio diskette.

MENU OPTION 1 -
BUILD PORTFOLIO FROM SEARCH RESULTS

PURPOSE: To create a portfolio from the results of a search that has been stored on a portfolio diskette. (see Chapter 10 - Search Menu)

PROCEDURE:

BUILD PORTFOLIO

ACTIVE PORTFOLIO = #

(1) CHANGE PORTFOLIO #

(2) BUILD PORTFOLIO FILES

(3) BACK TO MENU

YOUR CHOICE = >

1 - CHANGE PORTFOLIO

PRESS '1' from the Build Portfolio Menu.

ENTER desired portfolio number in response to: 'NEW PORTFOLIO #:'. A response is limited to a range of 1-255.

2 - BUILD PORTFOLIO FILES

Step 1: You will be instructed to insert a Manager diskette in the data drive. The portfolio inputs for the stocks isolated by a search will be read from the Manager.

Step 2: Re-insert a portfolio diskette when instructed.

The new portfolio will be created on your portfolio diskette.

On completion, the program will return to the menu for building a portfolio.

3 - BACK TO MENU

Returns you to the Utilities Menu.

MENU OPTION 2 - CONVERT FILES

PURPOSE: Maverick's 3.0 and later versions operate with a different format for the portfolio files than previous versions. This option allows you to convert portfolios to 3.0 format without recreating the portfolios.

PROCEDURE:

FILE CONVERTER

ACTIVE PORTFOLIO = #

(1) CHANGE PORTFOLIO #

(2) CONVERT PORTFOLIO FILES

(3) BACK TO MENU

YOUR CHOICE = >

The currently active portfolio is shown below the heading.

1 - CHANGE PORTFOLIO

PRESS '1' from the File Converter Menu.

ENTER desired portfolio number in response to: 'NEW PORTFOLIO #:'. A response is limited to a range of 1-255.

2 - CONVERT PORTFOLIO FILES

When satisfied with the Active Portfolio number, PRESS '2' to convert files to the 3.0 format.

If you attempt to convert a portfolio which has already been converted, a message 'PORTFOLIO # HAS BEEN CONVERTED' will appear.

If you attempt to convert a non-existent portfolio, a message 'PORTFOLIO # NOT FOUND' will appear.

3 - BACK TO MENU

Returns you to the Utilities Menu.

MENU OPTION 3 - DELETE PORTFOLIO

PURPOSE: To delete an entire portfolio in contrast to individual stock(s) within a portfolio.

PROCEDURE:

ACTIVE PORTFOLIO = #

(1) CHANGE PORTFOLIO #

(2) DELETE ACTIVE PORTFOLIO

(3) BACK TO MENU

YOUR CHOICE =

The currently active portfolio is shown.

1 - CHANGE PORTFOLIO

PRESS '1'.

ENTER desired portfolio number in response to: 'NEW PORTFOLIO #:'. A response is limited to a range of 1-255.

2 - DELETE ACTIVE PORTFOLIO

PORTFOLIO # WILL BE ERASED

ARE YOU SURE (Y/N)?

This gives you the ability to double check that the portfolio number is correct. PRESS 'Y' to erase the indicated portfolio.

If you attempt to delete a non existent portfolio, a message 'PORTFOLIO # NOT FOUND' will appear.

3 - BACK TO MENU

Returns you to the Utilities Menu.

MENU OPTION 4 - RENAME PORTFOLIO

PURPOSE: To change the number associated with a portfolio.

PROCEDURE:

ACTIVE PORTFOLIO = #

(1) CHANGE PORTFOLIO #

(2) RENAME ACTIVE PORTFOLIO

(3) BACK TO MENU

YOUR CHOICE = >

The currently active portfolio is shown.

1 - CHANGE PORTFOLIO

PRESS '1'.

ENTER desired portfolio number in response to: 'NEW PORTFOLIO #:'. A response is limited to a range of 1-255.

2 - RENAME ACTIVE PORTFOLIO

PRESS '2'.

Step 1: ENTER the new number that you wish to assign to the Active Portfolio. The program will accept responses in a range of 1-255. The new portfolio name will be displayed below the number that it will replace.

Step 2: Verify the accuracy of your inputs. Then, PRESS '2' again to execute this task.

If you attempt to rename a portfolio to one that already carries that name, a message 'PORTFOLIO # ALREADY EXISTS' will appear.

On completion, you will return to the sub menu above and the Active Portfolio will reflect your change.

3 - BACK TO MENU

Returns you to the Utilities Menu.

MENU OPTION 5 - CATALOG PORTFOLIO DISK

PRESS '5' to see which portfolios are stored on a portfolio diskette. This is helpful if you have several portfolios and cannot recall their numbers.

NOTE: The program assumes that you have a portfolio diskette in your drive when you execute 'CATALOG'.

MENU OPTION 6 - RETURN TO MASTER MENU

Return to the Master Menu for accessing other Maverick routines.

****

* * * DOWLOG * * *

VERSION 2

A PROGRAM TO DIAL UP, LOG ON,
AND FETCH STOCK QUOTE DATA FROM
THE DOW JONES STOCK QUOTE REPORTER

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****

Chapter 16

DOWLOG PROGRAM

PURPOSE: Dowlog retrieves current stock prices from the Dow Jones News/Retrieval Service. The prices are stored on a Quote Diskette. In addition, Dowlog provides capabilities to display or print stock quotes, edit quotes or manually enter stock quotes.

CONVENTION: In responding to questions, such as Which Stock List to Edit for example, you may be given a default choice. If you wish to select the choice displayed, simply PRESS return. At any time, you may make a selection other than the default choice.

START-UP

PROCEDURE:

Step 1: **Back-up Copy**

Before using Dowlog, use COPYA to produce a copy of the Dowlog Program diskette. The original should be stored in a safe place for making future copies if required.

Step 2: **Obtain Dow Jones Password**

To obtain your password, call Dow Jones at 1-800-257-5114. Use the following as a guide:

"I just purchased the Dowlog Program by Stock Market Software and wish to sign up for your Stock Quote Reporter Service."

Step 3: **System Configuration**

The first time you use the Dowlog program, the system's parameters must be established.

OF DRIVES? (1/2)

ENTER the number of floppy disk drives in your system.

HARD DISK OWNERS: If you respond with '2', Dowlog will assume that the program diskette is in

Drive I and the Quote Diskette is in Drive 2.

MICROMODEM SLOT

ENTER the slot number in which your Micromodem card resides.

NOTE: Dowlog will function with a DC Hayes Micromodem II or comparable modems.

CANADIAN USERS: To access the DATAPAC system, the Dow Jones Operating Guide indicates that there are two numbers, 573ØØØØØ and 633ØØØØØ. Depending on where you live in Canada, and if you are using a Canadian phone number, you must use one of these numbers. We allow you to enter this number on the same line as the entry for 'MICROMODEM SLOT #'. For example, if your micromodem is in slot 2 and you are using an Eastern Canada phone line, you would enter '2573ØØØØØ'.

DOW JONES PHONE #1
and
DOW JONES PHONE #2

In The Dow Jones News/Retrieval Operating Guide you will see that for some cities there are two access numbers listed. If you put both numbers in the parameter file, the program will dial the first one five times (if necessary), then dial the second one five times before quitting. If you enter a Ø instead of the second phone number, the program will only dial the first phone number five times before quitting. If you enter the first phone number in both slots, the program will dial that number ten times and then quit. You must enter a telephone number for #1 and either a Ø or a telephone number in #2.

TYMNET/TELENET (TY/TE)

ENTER 'TY' for Tymnet; 'TE' for Telenet.

Be sure that your response is consistent with the phone number entered previously. Since the logon procedure differs between Tymnet and Telenet, you will be unable

to retrieve stock quotes if the phone number does not agree with the network designation.

PASSWORD

ENTER the password given to you by Dow Jones. Verify that you have entered the correct password.

A password must be exactly ten characters long.

DATA BASE CHARACTER

To fetch stock prices for use in the Maverick, ENTER ' , ' (a comma). Refer to the Dow Jones News Retrieval Operating Guide for other alternatives.

NAME OF STOCK LIST

Limitations

1 - Eight (8) characters to a name.
2 - Name must start with a letter. Once a letter is entered, you may include numbers.

Within these limitations, select a name for a list.

Suggestions: 1) Try to keep list names as short as possible.

2) It is possible to have more than one stock list, but stocks should be integrated into one list as much as possible in order to minimize the costs of retrieval.

Note: If you have several lists, you must change this parameter before fetching quotes for a new list.

PRINTER SLOT

ENTER the number of the slot in which your printer interface card resides (normally 1).

PRESS return if you do not have a printer.

PRINTER CTRL STR (40)

PRESS the return key.

In order to generate an 80 column report with Dowlog, you must enter a parameter for your printer. The standard format is 'CTRL-I8ØN'. ENTER this sequence as follows:

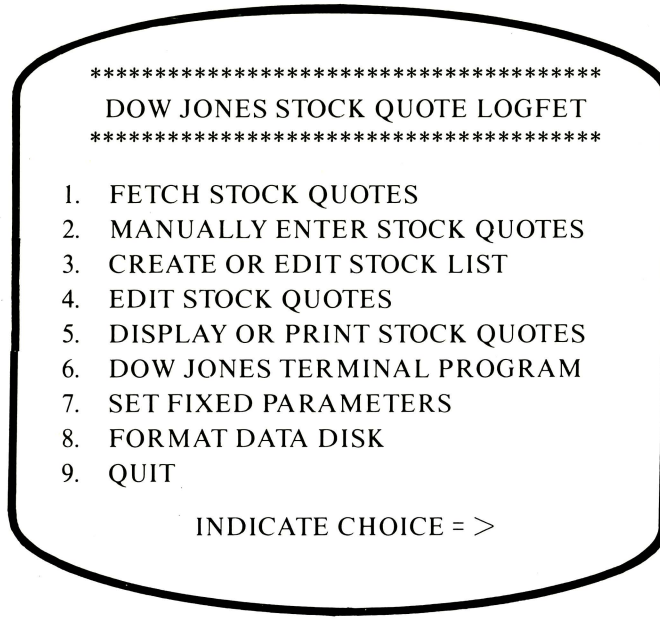
1) PRESS the Control Key and while holding it down, PRESS the letter I. Note that the letter "I" will be flashing.
2) Release both keys.
3) Type '8ØN'. Make sure that there are no spaces separating the four characters.
4) PRESS return.

MAKING CHANGES

If satisfied with all parameters, PRESS return. 'N' (NO) is the default choice.The parameters will be saved on your Dowlog Program diskette.

PRESS 'Y' if you wish to make changes. The cursor will be opposite "# OF DRIVES". PRESS return until the cursor moves to the parameter you wish to change. ENTER the change. Then, PRESS return until you must respond to "DO YOU WISH TO MAKE ANY CHANGES? (Y/N)."

MAIN MENU



Step 4: **Format Data Disk**

PRESS '8' from the above menu. To format a diskette, insert a blank diskette in the designated drive and press return.

You can return to the Main Menu by pressing 'M'.

With one drive system, remove the Dowlog Program diskette and insert a blank diskette. PRESS return to format the blank diskette.

With two drive systems, insert a blank diskette in Drive 2. PRESS return to format the blank diskette.

REMARKS: Regardless of the number of disk drives, you will be informed if an attempt is made to initialize a diskette with information already stored on it.

If this happens, PRESS 'C' to catalog the diskette. This permits you to see what information is stored on the diskette. This is particularly important if you have a single drive system.

If you see the files "DOWLOG", "MENU", "DOWFET", etc., you will know that the Dowlog Program diskette is in your drive.

Once you have verified that you wish to initialize the diskette in question, PRESS return.

PRESS 'X' to be given the opportunity to format a different diskette.

Once you have initialized a diskette, you will be given an opportunity to format another. It is recommended that you format at least two diskettes initially.

PRESS 'M' to return to the Main Menu.

NOTE: With a single drive system, make sure that you have reinserted the Program diskette before pressing 'M.'

Step 5: **Create Stock List**

NOTE: You may skip this step if you have created a Dowlog Stock List using Menu Option 4 in the Maverick Price Program.

PRESS '3' from the Main Menu.

TYPE NAME OF STOCK LIST = >

The name of the Stock List specified in your System Configuration will be flashing. To select that list, simply PRESS return. To select a different list (existing or to be created), ENTER the name.

FILE TYPES

YOU MAY PREFIX YOUR STOCK SYMBOLS WITH NUMBERS. THERE ARE TWO POSSIBLE OPTIONS:

1. GROUP STOCKS BASED ON SYMBOL

2. SEND NUMBERS TO DOW JONES TO BE INTERPRETED AS FOLLOWS:

    1 NEW YORK
    2 AMERICAN
    3 PACIFIC
    4 MIDWEST

1-GROUP STOCKS

Select this option if you intend to update Maverick portfolio prices with Dowlog. TICKER SYMBOLS ONLY

Dowlog permits you to prefix ticker symbols with a number from 1-9 to group stocks with alike characteristics. For example, you might prefix your Aerospace stocks with a 1, your Drug stocks with a 2, etc. This option should be used only for non-Maverick stock lists. If you prefix your ticker symbols with numbers, the Maverick will be unable to find a quote.

2-SELECT STOCK EXCHANGE

Dowlog also has the capability to retrieve quotes from a particular exchange rather than composite quotes. Again, the Maverick will not be able to update a portfolio if you have prefixed a ticker symbol with a number.

TYPE A TO ADD A STOCK NAME
TYPE D TO DELETE A STOCK NAME
TYPE L TO LIST STOCK NAMES
TYPE T TO CHANGE FILE TYPE
TYPE W TO WRITE FILE TO DISK
TYPE E TO EDIT A NEW FILE
TYPE M FOR MAIN MENU

COMMAND = >

COMMAND

A PRESS 'A' to enter ticker symbols. Upper case letters ONLY. Refer to the Dow Jones Operating Guide or Symbol Quik for appropriate tickers.

D PRESS 'D' to delete a stock from your list. ENTER the ticker for the stock to be deleted.

L PRESS 'L' to display or print the stock list.

W PRESS 'W' to store your list on the Dowlog Program diskette.

T PRESS 'T' to change the way tickers are interpreted for retrieval. See Step 5, File Types.

COMMAND

E	PRESS 'E' to work with a different stock list. WARNING: If you have made changes in one list without writing the changes to disk (W), pressing E will cause the changes to be lost.
M	PRESS 'M' for the Main Menu.

This concludes the section relating to START UP. The following instructions refer to the Main Menu options not discussed so far.

MENU OPTION 1 - FETCH STOCK QUOTES

PURPOSE: To automatically logon to the Dow Jones Stock Quote Reporter Service, retrieve current quotes for the list specified in your System Configuration and save the prices on your Quote Diskette.

PROCEDURE: PRESS 'I' from the Main Menu. Under normal conditions, the process of retrieving quotes is fully automatic. Each time you logon to the Dow Jones News/Retrieval Service, you will be informed of the free space available on your Quote diskette. If it is likely that the space is insufficient to store the quotes, you will be given an opportunity to provide another diskette.

LOST CONNECTION

A quote retrieval session can be interrupted for a number of reasons. The most common possibility is interference on the telephone line, which causes the connection between Dow Jones and your modem to be lost.

Dowlog gives you the capability to recover from such an event so that you can save the quotes already retrieved and begin again where the interruption occurred.

To recover, PRESS the reset key once. (Apple //e users should be holding the CTRL key down when reset is pressed.)

NOTE: If you do not have Autostart ROM and you have pressed reset to start over for any reason, you will find yourself in the monitor mode. (There will be an asterisk in front of the flashing cursor instead of the left bracket.)To return to Applesoft, type '3D0G', press return. Next type 'GOTO 50'. This will enable you to save partially fetched quotes.

DOW JONES LOGFET
****

LOGON FOR 10/01 HAS BEEN INTERRUPTED
YOU HAVE SUCCESSFULLY FETCHED
17 OF YOUR 50 STOCKS

TYPE S TO SAVE QUOTES
TYPE R TO RESTART PROGRAM
TYPE M FOR MAIN MENU

COMMAND

S	Save the partial list of quotes retrieved.
R	Restart the retrieval process, beginning with the first ticker symbol of the list. Use this option if a long series of meaningless characters have been transmitted.
M	Return to the Main Menu.

After 'S' has been selected and the partial quotes have been saved, the following choices will appear:

PRESS (R) TO RESTART PROGRAM
PRESS (RETURN) FOR MAIN MENU

PRESS 'R' to continue retrieving quotes from the point at which you were interrupted.

PRESS return to return to the Main Menu.

When the quotes have been fetched, they will be saved on your data disk. They will be named as follows: the letter you have chosen for your stock list followed by the date of the quotes expressed as MM/DD. Thus, if you chose D as your letter, the name of the file holding the quotes for August 15 would be DØ8/15. When you want to display or edit the quotes, you do not need to type the letter — just the day and the month. The program will add the letter when it reads your file.

MENU OPTION 2 - MANUALLY ENTER STOCK QUOTES

Note: To update a Maverick portfolio manually, use Option 1 from the Price Program. (see Chapter 12)

Pressing 2 will load the program MANUAL, which allows you to enter quotes yourself without using LOGFET. You will be asked the date of quotes; type this in the MM/DD format (i.e., Ø9/25 for September 25).

If this is the first time you have used the program, you will be asked which format you want for your data. Format 1 contains a stock's volume and closing price only; whereas format 2 contains high, low, closing and volume.

Later, if you wish to change format type, you must insert your program disk in a booted drive and type DELETE CH1 <RET>. Then, when you run MANUAL you will again be asked which format you desire and you can enter the new one.

WARNING: Be sure all data for a given date has been entered before doing this or you will risk losing the partial data.

Now each stock symbol on your stock list will appear, one at a time, on the screen with prompts for the quote data. You may enter the data in two forms:

Decimal eighths — for example, 11⅝ would be entered as 11.5. Be sure to type only one digit to the right of the decimal point.

Fractional — for example, 11 ⅝ would be entered as 11 5 8. Be sure to leave a space between the dollar amount and the fraction, or it will not be interpreted correctly.

Save option: There is a built-in provision for handling interruptions without losing data. If for instance, you have entered quotes up to IBM and then want to go back and change AA, simply press <ESC> repeatedly. Now, if you are interrupted for some reason, do the following. Be sure that the cursor is on the volume line and type SAVE. Even though AA is the stock on the screen, if you type SAVE you will save all quotes up to and including IBM. Now, when you return to finish entering quotes for that date, MANUAL will automatically start you at the stock following IBM. Saving may be done more than once; however, you must complete all of your data entry for a given date before proceeding to another date.

You also have the option of editing a previously entered day's quotes. When you are asked to enter the date at the outset, simply type in the date you wish to edit and you will find yourself in the edit mode. You will be asked which stock to edit. If you want just one stock type in its ticker symbol. If you want the whole list or any portion of it, type =. In this case you will be asked which stock to begin with; now, type in its symbol or press <RTN> for the beginning of the list. If, while going through the list, you see stocks you do not want to edit, simply press <RTN> until you reach the next entry you do wish to edit. To make changes, type the new data right over the old and press <RTN>. To quit at any time and return to the edit mode, type SAVE as instructed above.

NOTE: If you have used the backwards arrow, you must retype the date you passed over or it will be erased.

ALSO NOTE: If you exceed seven characters on an entry, you must retype the line or it will be erased.

MENU OPTION 3 - CREATE OR EDIT STOCK LIST

See 'START UP', Step 5.

MENU OPTION 4 - EDIT STOCK QUOTES

When you press 4 on the main menu you will be asked for the date of the file you wish to edit. (It must, of course, be a date for which you have already stored data.)Enter the date as MM/DD.

Press <RTN> and the following edit menu will appear:

```
**************************************************
                  STOCK QUOTE EDIT
**************************************************

        1.  EDIT FILE DATA
        2.  LIST STOCK SYMBOLS
        3.  EDIT STOCK QUOTE
        4.  ADD NEW STOCK QUOTE
        5.  DELETE STOCK QUOTES
        6.  SAVE EDITED QUOTES
        7.  EDIT NEW QUOTE FILE
        8.  RETURN MAIN MENU

                INDICATE CHOICE = >
```

Now, pressing 1 again will bring up the following display:

```
******************************************************
                  EDIT FILE DATA
******************************************************

              FILE DATA FOR MØ7/11 IS

        FILE TYPE              Ø
        NUMBER OF STOCKS       3
        DATE OF QUOTE          Ø5/1Ø/81
        TIME OF QUOTE          2Ø:15 EASTERN

        DO YOU WISH TO MAKE ANY CHANGES (Y/N)?
```

The file type should not be changed. This permits you to change the date of the quotes retrieved. For example, quotes are retrieved on a Sunday. You may want to change the date to Friday's date.

Pressing 2 will list the names in your stock list in the following format:

```
1) GM     2) HOI    3) IBM    4) LZ
5) PRM    6) RAL    7) T      8) UN
```

Pressing 3 will ask you for the stock symbol to edit. After you enter your choice and return, the following display will appear:

```
                EDIT STOCK QUOTE
            ************************

STOCK                       PRM
BID/CLOSE                   53 1/2
ASK/OPEN                    55
HIGH                        55 1/2
LOW                         54 1/8
LAST                        54 1/4
VOLUME (100'S)              1050

TYPE PRICE AS (PP N/D)

DO YOU WISH TO MAKE ANY CHANGES (Y/N)?
```

Now you can edit whatever line you wish. ENTER the price in fractional form, as PP N D.

PRESS 4 to add a new stock to your list. A display similar to the edit display will appear, except that the entries will all be blank. Type the new stock symbol, PRESS return, and enter the balance of the data.

PRESS 5 to delete a quote. The program will ask you for the stock symbol to delete. Entering that symbol and pressing return will delete that quote. If you just press return, the program will take you back to the menu.

PRESS 6 to save your edited file when you have finished making your changes. If you do not save your edited file, it will be lost when you load a new program.

PRESS 7 to fetch a new file to edit. First, the program will ask you if you have saved the file which is now in the computer. Remember, if you don't save this before fetching a new file, the old one will be lost. Next the program will ask you for the date of the new file you wish to edit. ENTER the new date and you will be back at the beginning of the edit program.

MENU OPTION 5 -
DISPLAY OR PRINT STOCK QUOTES

PRESS 5 to display or print the stock quotes in the list designated in the System Parameters.

STOCK QUOTE DISPLAY
****

1. DISPLAY QUOTES IN 40 COLUMNS
2. PRINT QUOTES IN 40 COLUMNS
3. PRINT QUOTES IN 80 COLUMNS
4. RETURN TO MAIN MENU

Select the desired option.

If you select print, be sure your printer is 'ON'.

ENTER the date for the prices you wish to see displayed in the form MM/DD.

If you wish to begin your listing with the first stock, PRESS return.

To start the list at any other point, ENTER the ticker symbol. The list will start with that stock and continue alphabetically.

MENU OPTION 6 - DOW JONES TERMINAL PROGRAM

You can access Dow Jones directly by pressing 6. The program will automatically dial up Dow Jones and log on. You will then be in the terminal mode and can use your keyboard to send any queries to the data bank. When you are finished, you should sign off as explained in their operating guide.

Then, while holding the Control Key down, type the letters 'AZ'. PRESS return. This sequence will disconnect the telephone.

Now you have the Applesoft prompt. ENTER 'PR#6' to return to the Main Menu.

MENU OPTION 7 - SET FIXED PARAMETERS

See "START UP", Step 3

MENU OPTION 8 - FORMAT DATA DISK

See "START UP", Step 4

MENU OPTION 9 - QUIT

To discontinue operating the Dowlog Program.

There are three additional programs on your diskette. The purpose is to assist you with writing programs using the quote files retrieved by Dowlog.

1. CHANGE DATE — This is used if you wish to change the date of the data file. You may want to do this if you update after midnight and the date shows the next day.

2. READ — This is a program which shows you how to read your data file. It is designed to be attached to your program. If you list it out, you will see how to read the Dow Jones data file.

3. FRACTION — This program changes fraction values to decimal. You may need this in your program to process data.

INDUSTRY CODE

1-Consumer Staples

1 Food Processors
2 Food Products
3 Conglomerates
4 Brewers/Distillers
5 Soft Drinks
6 Tobacco
7 Disposables
8 Housewares
9 Soaps
10 Toiletries
11 Food Chains
12 Food Wholesalers
13 Drug Chains
14 Drug Wholesalers
15 Food Services
16 Auto Parts Stores

2-Consumer Cyclical

17 Autos
18 Auto Parts
19 Tires
20 Aviation
21 Major Appliances
22 Small Appliances
23 Gift Items
24 Home Improvement
25 Furniture
26 Home Entertainment
27 Leisure Products
28 Toys & Games
29 Photography
30 Textiles
31 Clothing
32 Footwear
33 Department Stores
34 Discount Stores
35 Specialty Stores
36 Catalog Showrooms
37 Jewelry

INDUSTRY CODE

2-Consumer Cyclical (continued)

38 Retail Home Improvment
39 Multi-Media
40 Electronic Media
41 Print Media
42 Hotel/Motel
43 Restaurants
44 Motion Pictures
45 Building
46 Mobile Homes
47 Conglomerates
48 Miscellaneous

3-Health Care

49 Broadline Medical
50 Consumer Health
51 Ethical Drugs
52 Hospital Supplies
53 Hospitals
54 Nursing Homes
55 Medical Equipment
56 Medical Devices
57 General Healthcare Services
58 Miscellaneous

4-Technology

59 Mainframe Computers
60 Mini-Computers
61 Micro Computers
62 Special Processors
63 Networks
64 Word Processing
65 Printers & Displays
66 Memory Products
67 Data Entry Systems
68 Precision Equipment
69 Test Equipment
70 Lasers
71 CAD/CAM

INDUSTRY CODE

4-Technology (continued)

72 Graphics
73 Telecommunications
74 Aerodefense
75 Defense Electronics
76 Semiconductors
77 Semiconductor Supplies
78 Electronic Components
79 Environmental Controls
80 Process Controls
81 Pollution Controls
82 Diversified Technology

5-Energy

83 Oil - Integrated International
84 Oil - Integrated Domestic
85 Oil/Gas Production
86 Refining/Marketing
87 Tax Shelter
88 Oil Equipment & Service
89 Drilling - Offshore
90 Drilling - Land
91 Pipeline - Interstate
92 Pipeline - Intrastate
93 Coal
94 Diversified Energy

6-Basic Materials

95 Aluminum
96 Steel
97 Chemicals
98 Specialty Chemicals
99 Construction Materials
100 Forest Products
101 Cement
102 Paper
103 Mining
104 Agricultural

INDUSTRY CODE

7-Industrial Manufacturing

105 Metal Fabrication
106 Bearings
107 Specialty Paper/Containers
108 Containers - Metal/Glass
109 Heavy Construction
110 Machinery - Construction
111 Machinery - Industrial
112 Machinery - Mining
113 Machine Tools
114 Fluid Processing
115 Building Hardware
116 Electrical
117 Coatings & Abrasives
118 Farm Equipment
119 Trucks
120 Auto Components
121 Rail Equipment
122 Conglomerates

8-Services

123 Data Processing
124 Software
125 Financial Services
126 Office Equipment
127 Office Supplies
128 Insurance Brokers
129 Advertising
130 Printing
131 Consulting
132 Engineering
133 Waste Disposal
134 Equipment Leasing
135 Miscellaneous Services

INDUSTRY CODE

9-Financial

136 Banks - Northeast
137 Banks - Southeast
138 Banks - Central
139 Banks - Southwest
140 Banks - West Coast
141 Insurance - Full Line
142 Insurance - Life
143 Insurance - Property/Casualty
144 Insurance - Specialty
145 Insurance - Auto
146 Securities Brokers
147 Savings & Loans
148 Diversified

10-Transportation

149 Airlines
150 Air Freight
151 Trucking
152 Rails
153 Maritime

11-Utilities

154 Electric
155 Gas
156 Electric & Gas
157 Telecommunications

Appendix A

The Value Model

I Advantages

Growth Stocks

The Maverick is different from other valuation approaches because it does not have an inherent bias against growth companies or stocks paying minimal dividends. The Maverick model has demonstrated a consistent ability to distinguish between the times when growth stocks are attractive and when they are not. The following exhibit over a one year's time span illustrates this:

	DJIA: 852.85 October 30, 1981	DJIA 808.60 July 30, 1982		DJIA: 986.85 October 9, 1982
	MARKET MAVERICK IDENTIFICATION:	ACTUAL OUTCOME:	MARKET MAVERICK IDENTIFICATION:	ACTUAL OUTCOME:
M/A Com Tandem Warner Communications Scientific Atlanta	Unattractive, downside risk in excess of 40%	Declines Averaging 44%	Attractive, Appreciation Potential in excess of 47%	Collectively rose 32%

Measuring Risk

The Maverick Model equates risk to the variability of earnings around a trendline, since there is a definite relationship between earnings volatility and P/E's. Most other approaches equate risk to the volatility of a stock's price (Beta). This method has shortcomings because Beta's are extremely unstable over time. That is, if you compare a stock's Beta in successive 6 month time periods, there will be little relationship in many cases. In contrast, a stock's earnings volatility is significantly more predictable.

II The Stock Market Model

S&P 400

The Standard & Poor's Industrial Index (S&P 400) is defined as the market because it is a broad average with sufficiently detailed historical data to derive some of the relationships discussed below. The Maverick first computes a Target P/E for the market. Individual stock P/E's are then based on the market P/E. This method minimizes problems with growth stocks.

The premise for most stock valuation models is that the value of a security is equal to the present worth of all future dividends. This concept is appropriate for the market, but fails for individual stocks. If we assume that the market is priced based on future dividends, the formula for its P/E is as follows:

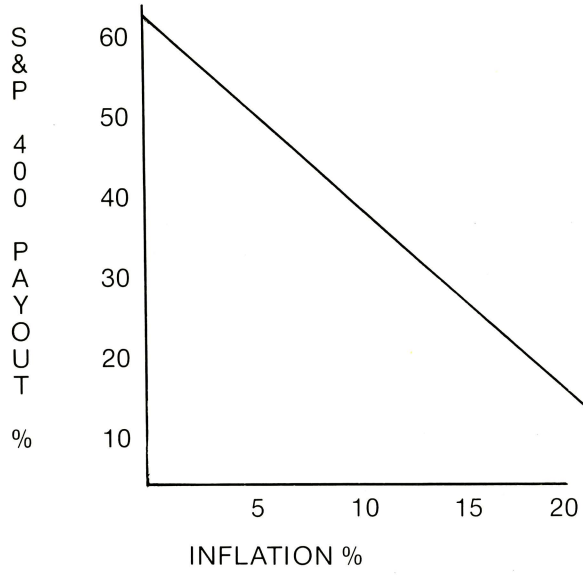
$$\text{Market P/E} = \frac{\text{Dividend Payout Ratio}}{\text{Discount Rate - EPS Growth Rate}}$$

As indicated in Chapter 6, the Maverick is an inflation model. The next few pages discuss the relationship of inflation to each of the elements in the above equation.

Deriving the Market P/E

Dividend Payout Ratio

CHART I



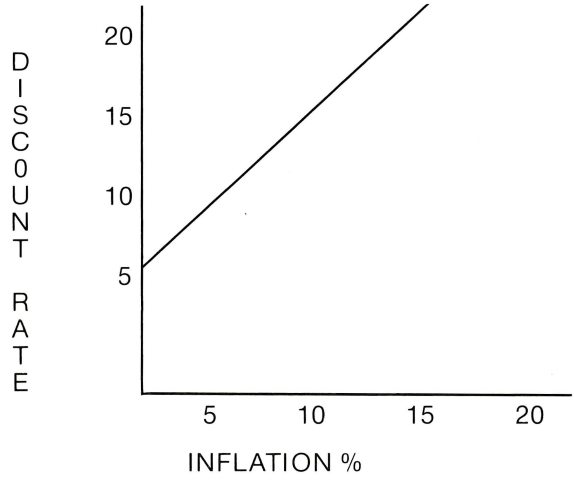
As you can see from the above chart, the S&P's payout ratio falls as inflation increases and rises when inflation subsides. For most years historically, inflation has ranged between 0 - 10%. The S&P's payout has fluctuated between 35% - 60%. As inflation increases, plant and equipment costs rise sharply, forcing corporations to retain a greater proportion of their earnings to expand and replace old equipment. The formula for the S&P's payout ratio is as follows:

$$\text{Payout} = 0.602 - 2.3 \times \text{inflation rate}$$

Thus, if the projected inflation rate is 6%, the payout ratio is 46.4%. In summary, as inflation rises, the payout declines and the market's P/E declines.

Discount Rate

CHART II



The discount rate is the rate of return that investors expect to earn from common stocks. When inflation rates rise, investors demand more from stocks because greater returns are available from alternative investments. With the availability of money market funds yielding 10% or more in recent years, this factor has been a big deterrent to stock price performance. The formula for the discount rate is:

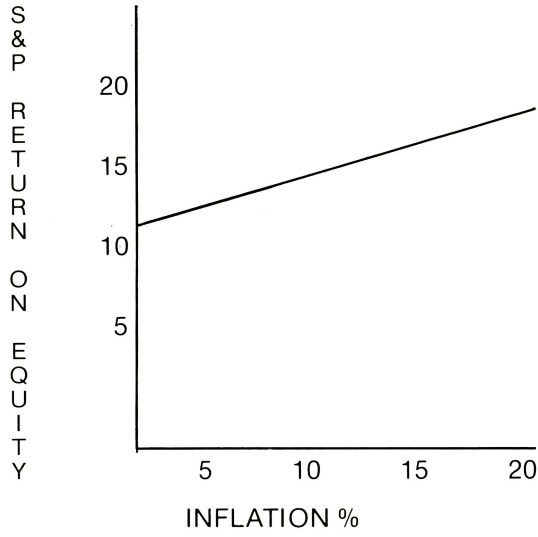
Discount Rate = .06 + inflation rate

A 6% inflation rate produces a 12% discount rate. As inflation rises, the discount rate increases, and the market's P/E contracts. The above formula is based on an excellent study of inflation and investment returns:

> *Stocks, Bonds, Bills, and Inflation: The Past and The Future*, Roger G. Ibbotson and Rex A. Sinquefield, The Financial Analysts Research Foundation, 1982.

Return on Equity

CHART III



Historically, earnings growth rates have correlated poorly with inflation. The market's return on equity has had a consistent relationship with inflation, however. Since the market's earnings growth rate is related to its return on equity, we work with the return on equity in our model.

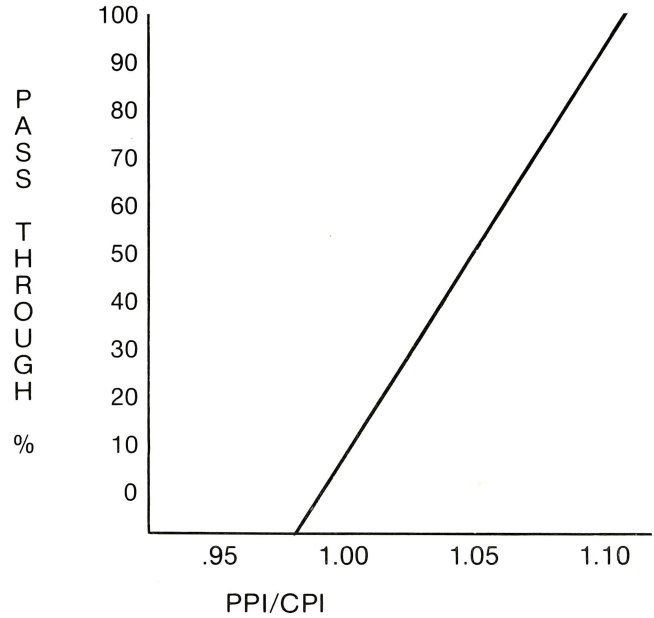
As the inflation rate rises, corporate returns on invested capital also rise. Of the three components that comprise the market's P/E, the return on equity is the only one that benefits from inflation. One reason for the positive relationship of equity returns to inflation is that corporate net income rises faster than shareholders' equity in an inflationary environment. In short, as the return on equity rises, the market P/E expands. The formula is:

Return on Equity = .114 + Pass-Through x Inflation Rate

The inflation pass-through is a new concept. It is explained with the next chart. In Chart III, the slope of the line is the pass-through. It has averaged .3 historically.

Inflation Pass-Through

CHART IV



The pass-through is a measure of corporations' ability to pass on higher costs, particularly labor costs. Because the pass-through has been unstable over time, it is an input in the Maverick as opposed to a constant. The pass-through has had a close historical relationship to the ratio of the Producer Price Index (PPI) to the Consumer Price Index (CPI). That is, when the PPI (selling prices) is rising at a faster rate than the CPI (costs), corporate margins tend to expand. As you can see in the chart above, the pass-through has risen sharply as the ratio of the PPI to the CPI has risen. For purposes of estimating the pass-through the following formula and example will be helpful.

$$\text{Pass-Through} = 8.46 \times (\text{PPI} \div \text{CPI}) - 8.31$$

EXAMPLE: For 1981, the CPI was 272.4 and the PPI was 269.8. The ratio of the PPI to the CPI was thus 0.990. (269.8 ÷ 272.4) The pass-through would then be: 8.46 x 0.990 - 8.31 = .0654. After rounding, you could therefore use a 7% estimated pass-through.

The pass-through estimate covers a period of the next 3 - 5 years. Thus, the current relationship of the PPI to the CPI is only one factor to consider. Keep in mind that the pass-through has averaged 30% historically.

III Pulling It All Together

Now that we have examined the effect inflation has on payout ratios, discount rates and returns on equity, a market P/E is calculated given an inflation and pass-through forecast as follows:

$$\text{Market P/E} = \frac{\text{Payout Ratio}}{\text{Discount Rate - Growth Rate}}$$

The growth rate can be derived directly from the market's estimated return on equity.

Internal Growth Rate = Return on Equity x (1 - Payout Ratio)

Example:

Return on Equity = 13%; Payout Ratio = 50%; Growth Rate is unknown.

13 x (1 - .50) = 6.5%. Thus, the growth rate is 6.5%.

Continuing with the example, if the discount rate is 10%, then the Market's P/E is:

$$\text{P/E} = \frac{.50}{.10 - 0.65} = 14.3$$

Once a market P/E has been derived, the Market Maverick calculates how long it will take the market to earn its P/E. Using the same example as above, it will take the market approximately 10 years to earn a P/E of 14.3 given a growth rate of 6.5%. This period is referred to as the earnings payback period. The first year, $1.065 is earned, then $1.134, $1.208, $1.286, $1.370, $1.459, $1.554, $1.655, $1.763, and $1.877, which adds up to $14.372.

The following table illustrates the market's P/E at different inflation rates, assuming a 50% pass-through for each.

TABLE I

Inflation Rate	Market P/E	Payback Period
12%	5.2	3.9 Yrs.
11	5.8	4.4
10	6.5	4.9
9	7.3	5.4
8	8.3	6.1
7	9.4	6.8
6	10.8	7.7
5	12.6	8.8
4	14.9	10.2
3	17.9	12.0

Notice how the P/E declines as inflation rates rise. This coincides with experience. Investors simply are not willing to pay as much for a $1 of earnings as inflation rises.

IV The Individual Stock Model

Basic P/E

Once a market P/E and payback period have been calculated, a stock's basic P/E is calculated by accumulating $1 of earnings over the payback period at the expected growth rate.

EXAMPLE: Assume that a stock is growing at 25% and that the payback period is 5 years. The stock's basic P/E will be 1.25 + 1.56 + 1.95 + 2.44 + 3.05 or 10.25.

If inflation were to fall, stretching the payback period to 8 years, a 25% growth company would have a basic P/E of 24.8.

Assuming a 7% inflation rate and a payback period of 6.8 years (see Table I), the following indicates stock basic P/E's for a representative sample of growth rates. (THIS TABLE OF VALUES WILL BE REFERRED TO IN EXAMPLES BELOW)

TABLE II

Growth Rate	Basic P/E
40%	31.2
30	21.6
25	17.9
20	14.8
15	12.2
10	10.1
5	8.3

Adjustments

Payout Ratio

Given a basic P/E for a stock, the program adjusts for the difference between the stock's dividend payout ratio and the market's payout. This payout ratio adjustment is computed as follows:

EXAMPLE: Stock XYZ's basic P/E is 14.8 (20% growth rate, see Table II) and 20% of its earnings are paid out in dividends. The market's payout ratio is 44%.

Step 1: Calculate XYZ's Yield: its payout ratio divided by its P/E

$.20 \div 14.8 = \underline{0.0135}$ (1.35%)

Step 2: Calculate Market's Yield: Substituting the market's payout (44%) for XYZ's payout (20%) will produce the market's yield, if the market were to grow at XYZ's rate (20%).

$.44 \div 14.8 = \underline{0.0297}$ (2.9%)

Step 3: Calculate the yield discount or premium of XYZ: divide XYZ's yield by the market yield.

$1.0135 \div 1.0297 = \underline{0.9843}$. This is a yield discount of 1.6% (1 -.9843).

If XYZ's payout had been 50% instead of 20%, its yield would have been 3.38% (.50 ÷ 14.8) as opposed to 1.35%. In that case, there would have been a yield premium of 0.4% (1.0338 ÷ 1.0297 - 1.0040).

Step 4: Compound Discount/Premium over Payback Period (see Table I): The calculated discount/premium is raised to the power of the payback period.

$$\text{Discount/Premium}^{\text{Payback Period}} = \text{Compounded Discount/Premium}$$

We will be using a payback period of 6.8 years.

$0.9843^{6.8} = \underline{0.898}$ (a 10.2% discount)

Step 5: Stock's Adjusted P/E: the basic P/E is multiplied by the compounded discount/premium.

$14.8 \times 0.898 = 13.3$

The adjusted P/E of 13.3 for XYZ compensates for the lower income an investor would earn if he bought XYZ.

In the beginning of this chapter we referred to the Maverick's ability to deal with stocks that pay no dividends. Let's elaborate on that specifically, using the same parameters for the market as established in the previous example.

EXAMPLE:

Stock FSI has a 30% growth rate and pays no dividend.

Using Table II, we see FSI's basic P/E is 21.6.

Step 1: FSI's yield is ∅

Step 2: the market's yield is 2.04% (.44 ÷ 21.6)

Step 3: the yield discount for FSI is 0.9800 (1.0 ÷ 1.0204) which is a 2% discount (1 - .9800)

Step 4: the compounded discount is 0.8716 ($0.9800^{6.8}$), or a 12.8% discount

Step 5: FSI's adjusted P/E is 18.8 (21.6 x 0.8716)

The 12.8% discount is minimal compared to the implied discount used by other models. This is one reason why the Maverick has worked so well over the years.

Volatility Factor

A second adjustment is made for the difference between a stock's earnings volatility and the market's volatility.

EXAMPLE:

XYZ's volatility factor is 15% and the S&P 400's is 25%

Step 1: This implies that there is 10% less risk of XYZ's earnings deviating from its trendline than there is for the S&P

.25 - .15 = .10 (10%)

By paying 10% more for XYZ, we can equalize the risk of an earnings disappointment.

Step 2: Target P/E: Apply the volatility premium/discount of a stock to the payout adjusted P/E to reach a target P/E.

1.10 x 13.3 = 14.6

Calculating the Target Value

The target P/E for a stock is multiplied by the next year's estimated earnings per share to reach a target value.

EXAMPLE:

XYZ is projected to earn $3.00 next year. XYZ's target price is therefore $43.80:

3 x 14.6 = 43.80

The target value of $43.80 is compared to XYZ's current price of, say, $30 to derive XYZ's potential.

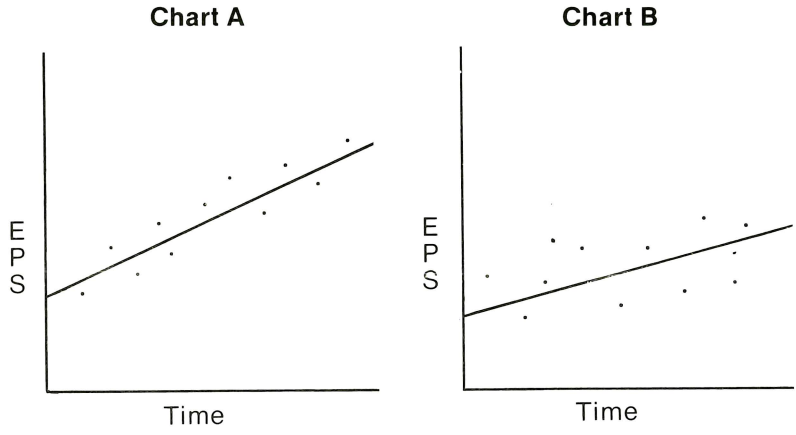
43.80 ÷ 30 = 1.46

XYZ accordingly has an upside potential of 46%

V The Earnings Volatility Factor

Risk Defined

The Market Maverick defines corporate risk in terms of the variability of earnings around a trendline. Investors are willing to assign a higher P/E to a stock with stable earnings than to a stock with widely fluctuating earnings. Charts A and B will be expounded on in the balance of this section.



Charts A and B show ten years of earnings for Stocks A and B. A trendline has been drawn through the individual EPS observations for each stock. A's EPS are clustered tightly around the trendline, while B's EPS are loosely scattered. Applying our definition to charts A and B, we can conclude that stock A is a less risky Stock than B.

Calculating the Volatility Factor

When several years of historic EPS are input into the Maverick, a trendline that best fits the individual EPS observations is calculated. The trendline is "drawn" to minimize the distances of the EPS points from the line. A measure of the dispersion (or concentration) of EPS observations around the trendline is then calculated. This measure of dispersion is called the volatility factor. The volatility factor for Stock A is lower than that of Stock B.

In theory, the volatility factor can range from 0 (all the points ON the trendline) to 100 (no discernable trend at all). However, in practice, the Maverick sets an upper limit of 45 to the volatility factor. In actual use of the model, it has been found that it is not reasonable to use much more than a 20% P/E discount for earnings volatility. Since the S&P 400's volatility factor is defined as 25, a volatility factor of 45 for a stock would equate to a P/E discount of 20% (25 - 45 = -20). In summary, the volatility factor should be thought of as the percentage dispersion of earnings per share points around a trendline.

Trendline Growth

Another benefit from calculating the volatility factor is that the Market Maverick also displays the historic growth rate for a stock. The steeper the slope of a stock's trendline, the more rapid is the stock's growth. In comparing Charts A and B, you know instantly that A's growth has been more rapid (by the greater slope of the trendline) than B's. The growth rate displayed by the Maverick is the slope of a stock's trendline.

Mathematical Section

The Maverick estimates a trendline using the following model for continuous growth:

$$(1)\ EPS = a \times e^{(\text{growth} \times \text{time})}$$

This is the same as plotting the earnings observations on semi-log graph paper. The slope of the regression line is the continuous growth rate. The standard error of estimate for the regression equation is defined as follows, where $\hat{s}$ is estimated standard deviation of earnings, and r^2 is the coefficient of determination:

$$(2)\ \text{Standard error} = \hat{s} \times \sqrt{1 - r^2}$$

To normalize the standard error so as to facilitate comparisons between stocks, divide each side of (2) by $\hat{s}$. This produces the volatility factor.

$$(3)\ \text{Volatility factor} = \sqrt{1 - r^2}$$

Appendix B

Error Handling for the Market Maverick

The most common errors are handled with specific messages. "PORTFOLIO NOT FOUND" is an example. The purpose of this Appendix is to help you understand and correct the less obvious errors.

RESET PRESSED

Pressing RESET with autostart ROM (i.e., your disk drive is booted when you turn on your computer) invokes the above message. Without autostart, recover by entering '3DØG' and then entering 'RUN MAST'.

Inadvertent resets are impossible to avoid entirely. Pressing RESET on purpose is a poor practice. The implications of pressing RESET are:

(1) While Disk is operating:

If reset is pressed while the program is saving information, the chances are excellent that your portfolio will be destroyed.

If reset is pressed while data is being read from a diskette, the information may be garbled. In the Search Program, return to the Master Menu and reenter the Search Program again. In other programs, change the portfolio # and read the portfolio again.

(2) Maintenance Program

If you press reset while partially through the process of adding a stock, some of the parameters or the price may be set to zero (Ø). Clearly, this will cause problems later. Delete the stock in question and list your portfolio to insure that the parameters are correct.

(3) Price Program

Pressing reset when the program is in the middle of a price update (manual or auto) may cause some prices to be set to zero (Ø). Use the Edit option to check prices.

INTERRUPT ATTEMPTED

Halting program execution by typing CTRL-C has similar implications to reset. See above discussion.

THE DISK IS WRITE PROTECTED
PLEASE REMOVE TAB

This error will occur when a write protect tab has been placed on a diskette to which the program is saving data. Remove the tab if present and proceed to resave the information.

No Write Protect Tab

This error can also occur if a disk drive's head is out of alignment. Make a copy of the diskette in the disk drive in question. Often, the copy will perform well where the original failed.

INSURE THAT DISK IS PROPERLY INSERTED

The disk drive door is open or the diskette has not been initialized. Occasionally, the above message will appear if a diskette has been damaged. Try the backup copy of the diskette in question.

PLEASE CHECK THAT THE PROPER DISKETTE IS INSERTED

This error occurs most frequently on a single disk drive system when a program attempts to locate another program. The problem can be corrected by inserting the Maverick Program diskette (with the Serial #) in your drive.

YOUR PORTFOLIO DISKETTE IS FULL

There isn't enough space on your portfolio diskette to hold the new information being saved. You will be given an opportunity to save the portfolio data on an initialized DOS 3.3 diskette (referred to as "scratch diskette").

Note that the scratch diskette can contain other programs or data. The objective is to temporarily save the portfolio so that it can be transferred to a fresh portfolio diskette later.

1 - Search Program

To save the results of a search, press any key and then press 'Y' in response to:

SAVE SEARCH ON SCRATCH DISKETTE (Y/N)?

You will be returned to the sub menu for saving a search. Proceed as if you were saving the search for the first time.

If you press 'N' to the above question, the program will return to the Search Menu.

2 - Utilities Program

To save the new portfolio, press any key and then press 'Y' in response to:

SAVE PORTFOLIO ON SCRATCH DISK (Y/N)?

The program will prompt you to insert a portfolio diskette and store the new portfolio on the scratch diskette. You will be returned to the Build Portfolio Menu.

If you press 'N' to the above question, the Utilities Menu will appear. The results of the search with which you were working will be lost.

3 - Maintenance Program

Press any key to return to the Maintenance Menu. To save the portfolio on a scratch diskette, press '6' and supply a scratch diskette when prompted to insert a portfolio diskette.

TRANSFERRING PORTFOLIOS

Use the FID program on your DOS 3.3 diskette to transfer a portfolio from a scratch diskette to a fresh portfolio diskette. There are three files for each portfolio: STOCK SYMBOLS, STOCK PARAMETERS and STOCK PRICES.

AN ERROR HAS OCCURRED WITHIN THE PROGRAM

This message applies to all errors not mentioned above. Make a note of the Error Code and Line #. If the error is not referred to below, contact Financial Software, Inc., (216) 338-6811. We will ask you to tell us what program was being operated and what you were doing before the error occured.

ERROR #

5 The program has found only a portion of the data expected. A portfolio or the Manager diskette has been partially destroyed. Use your backup copy.

ERROR #

7 You have specified a volume # in your System Configuration that does not match the volume in your hard disk or diskette. If you don't have a hard disk, answer 'N' to the HARD DISK question in your configuration.

10

Program	Line #
Valuation	9011
Sensitivity	9011
Maintenance	9521

If any of the above apply, the odds are that you are trying to read an old portfolio (prior to Maverick 3.0). Use the Utilities Program to convert the portfolio to 3.0 format.

If the portfolio has been converted, then something has caused the portfolio to be stored improperly. Most likely candidates: Pressing reset or CTRL-C as mentioned above. You will have to recreate the portfolio.

133 We have done our best to prevent a zero (Ø) from being entered for any parameter which is divided into something else. The above message indicates that either the growth rate, earnings (EPS) or price for a stock is zero (Ø). As mentioned above, a zero (Ø) can be entered by pressing reset or CTRL-C at the improper time. Check the growth rates, earnings and prices in your portfolio and enter the proper figures where a zero (Ø) exists.

254 When reading a diskette, the program encountered unexpected data. Often, this may mean that a particle of dust has damaged the diskette. Try the backup copy of the diskette in question.

Glossary

Absolute Value
: The measurement of a stock's value in terms of a comparison between the price and the Maverick's Target Value.

Appreciation Potential
: see Upside Potential

Attractive
: A stock is attractive if it has significant upside potential and a favorable Timeliness rating.

Base Building
: A period of consolidation (see Consolidation) after a major decline which a stock must go through before advancing again.

Bear Market
: When the primary general market trend is negative

Boot
: To start a computer by loading the operating system and program from an external storage device such as a disk.

Breakeven Analysis
: To set the Target Value equal to the current price and solve for the growth rate or estimated earnings.

Breakout
: An upside or downside breakout occurs when a stock moves decisively above or below a price range that has been maintained for some time. Normally, a breakout is accompanied by an increase in trading volume.

Bull Market
: When the primary general market trend is positive.

Buyout
: The acquisition of a company by another company or group of individuals by tender offer or merger.

Call Option

The right to purchase a stock at a specific price for a limited period of time.

Cheap

Cheap stocks are defined as having at least 25% or more upside potential.

Consolidation

A period of essentially sideways price movement in a relatively narrow trading range following a significant advance or decline.

Consumer Price Index

A measure of change in prices of goods and services bought by wage earners. It is calculated by comparing the cost of a "market basket" of goods and services purchased by urban wage earners.

Contrarian

An investor who intelligently deviates from the opinion of the majority of investors.

Correction

A price decline within a bull market.

Covered Call Option

Selling a call option when a position in the underlying stock is held.

Current P/E

A stock's current price divided by estimated earnings per share. For example, if a stock's price is $23 and its estimated earnings is $2, then its P/E is 11.5.

Default Value

A value that is automatically used by the program when no other explicit information is given by the user.

Discovery

The process by which more and more investors become aware of a stock's favorable attributes.

Downside Risk

Downside risk is the percentage by which a stock must decline to reach its target value.

Earnings Payback Period

see Payback Period

EPS

Earnings Per Share. If a company has net income of $2 million and 1 million shares outstanding, its earnings per share will be $2.00.

EPS Growth Rate

see Growth Rate

EPS Volatility

The deviation of earnings around a trendline.

Expensive

Expensive stocks are defined as having at least 25% or more downside risk.

Exploited Stock

A stock is exploited when the vast majority of investors likely to buy have already taken positions. A stock is presumed to be exploited when it is trading 25% or more above its target value.

Greater Fool Theory

A belief that you can achieve satisfactory investment results by acting after a major shift in crowd psychology is apparent.

Growth Rate

The projected compounded annual rate at which a stock's earnings are expected to expand over the next five years.

Initialize

To format a diskette so that information can be stored on the diskette.

Institutional Ownership

The percentage of a company's outstanding stock held by mutual funds, banks, investment advisors and other institutional investors.

Leaders (Industry)

The most consistent, best managed companies within an industry.

Leadership

The stocks or industry groups that perform best in a bull market.

Liquidating Value

The value of a company's assets assuming that the assets will be sold.

Long Term

As defined by current tax law, a holding period of one year or more. In this context, long term investors seek to hold an investment for at least one year.

Momentum

A synonym for Timeliness.

Naked Call Writing

Selling a call option without a holding in the underlying stock.

Neglected Stock

A stock is neglected when those investors most likely to sell have eliminated their holdings. When a stock is trading at a discount of 50% or more to its target value, this is prima facie evidence that it is neglected.

Options

Call or put options or both (see respective definitions)

Out-of-Favor

A stock is out of favor when the news is negative and it is difficult to justify taking a position.

P/E

see Price-earnings ratio

Payback Period

The length of time that it will take the market to earn its target P/E.

Payout Ratio

The percentage of a company's earnings which are paid to shareholders in dividends.

Price Cycle

The normal pattern of a stock's price movement as investor psychology swings from optimism to pessimism.

Price-Earnings Ratio

The price of a stock divided by current or estimated earnings.

Price-to-Book Value

The price of a stock divided by the per share value of the company's assets as stated on the books.

Producer Price Index

A measure of the direction of price movements of goods priced in large lots. The index does not measure the prices of retail transactions. The index should be thought of as the prices paid by wholesalers and distributors.

Prompts

Questions asked by the program where the user is required to respond before proceeding.

Psychology

The opinions, attitudes and emotions of investors with respect to a given stock.

Put Option

The right to sell a stock at the specific price for a limited period of time.

Quality

The consistency of a company's earnings and dividend record and the amount of financial leverage.

Reaction

A decline in the price of a stock.

Reappraisal

The process by which an increasing number of investors become aware of a stock's shortcomings.

Relative Price

see Relative Strength

Relative Strength

The performance of a stock compared with other stocks. The performance and trend of a stock's price relative to other issues is useful in predicting the direction of market psychology.

Relative Value

The measurement of Value in terms of a ranking of Manager stocks. Thus, the best relative values are found in the top 20% (rank of 1 or 2), while the poorest relative values are found in the bottom 20% (rank of 9 or 10).

Return on Equity

A corporation's net income divided by shareholders' equity. For example, Verbatim Corp. had a net income of $9,351,000 and average shareholders' equity of $24,908,000 in 1982. It therefore had a return on equity of 37.5%.

Secondary Company

The companies which are not leaders in their industry. Generally, the secondary stocks will have more erratic earnings and dividend records than the leaders.

Sensitivity Analysis

The process of discovering how a stock's target value reacts to changing the basic inputs.

Short Selling

Selling a stock which is not in the seller's possession at the time of sale. The trade is closed out when the stock is repurchased. Short sellers profit if the stock price declines, and lose if the price advances.

Short Term

In tax terms, a holding period of less than one year.

Sponsorship

The support of a stock by opinion leaders such as brokers, institutions and leading advisory services.

Stabilization

A stock is said to have stabilized when the relative price has not risen or fallen significantly within the last 13-26 weeks.

Stock Symbol File

A space on your Portfolio diskette containing the ticker symbols for the stocks in a portfolio.

Stock Ticker Symbol

A shorthand for identifying stocks. Ticker symbols are limited to five (5) characters and consist of upper case letters.

Stop-Loss Order

An order which automatically becomes a market order whenever the stock price falls to or below the price indicated in the order.

System Configuration

A description of your computer system and personal preferences so that the program can be tailored to your needs.

Target P/E

A best estimate of the appropriate price-earnings ratio for a stock based on its anticipated growth rate, dividend payout ratio and earnings volatility.

Target Value

The best estimate of a stock's fair price given a time horizon of one year.

Timeliness

A measure of the trend of investor psychology. Stocks with strong Timeliness ratings have a greater probability of performing over the short term than those with weak Timeliness ratings.

Trendline Growth Rate

The smoothed historic earnings growth rate produced by the

Maverick's volatility calculator. The trendline growth rate minimizes the influence of the beginning and ending years.

Upside Potential

The percentage by which a stock must rise to reach its Target Value.

Valuation Analysis

To calculate the upside potential for the stocks in a portfolio.

Value Indicator

A ranking of Manager stocks on a 1 - 10 scale according to their upside potential or downside risk.

Volatility

see EPS volatility

What-If Analysis

To gain confidence regarding a stock's attractiveness by testing alternative assumptions.

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